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SOUTHERN
TEXTILE BULLETIN

VOL. 32 CHARLOTTE, N. C., THURSDAY, JULY 28, 1927 NUMBER 22

You Buy Northrop Looms
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Draper Loom Repairs
For the Same Reason
Let's Talk It Over

DRAPER CORPORATION
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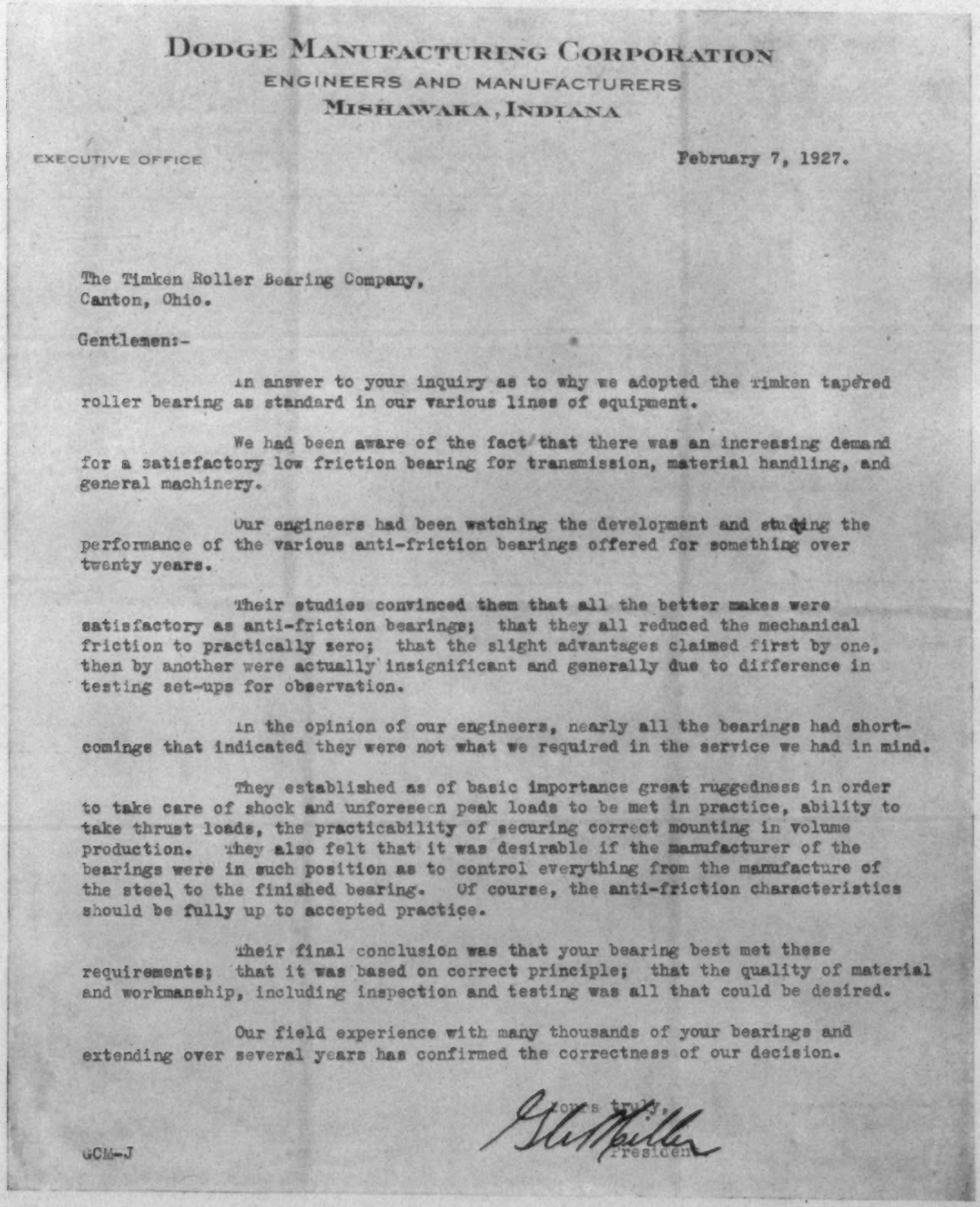
President G. C. Miller of Dodge *re Timken Bearings*

"Their final conclusion was that your bearing best met these requirements . . . Field experience . . . over several years has confirmed the correctness of our decision."



DODGE MANUFACTURING CORPORATION
ENGINEERS AND MANUFACTURERS
MISHAWAKA, INDIANA

EXECUTIVE OFFICE

February 7, 1927.

The Timken Roller Bearing Company,
Canton, Ohio.

Gentlemen:-

In answer to your inquiry as to why we adopted the Timken tapered roller bearing as standard in our various lines of equipment.

We had been aware of the fact that there was an increasing demand for a satisfactory low friction bearing for transmission, material handling, and general machinery.

Our engineers had been watching the development and studying the performance of the various anti-friction bearings offered for something over twenty years.

Their studies convinced them that all the better makes were satisfactory as anti-friction bearings; that they all reduced the mechanical friction to practically zero; that the slight advantages claimed first by one, then by another were actually insignificant and generally due to difference in testing set-ups for observation.

In the opinion of our engineers, nearly all the bearings had shortcomings that indicated they were not what we required in the service we had in mind.

They established as of basic importance great ruggedness in order to take care of shock and unforeseen peak loads to be met in practice, ability to take thrust loads, the practicability of securing correct mounting in volume production. They also felt that it was desirable if the manufacturer of the bearings were in such position as to control everything from the manufacture of the steel to the finished bearing. Of course, the anti-friction characteristics should be fully up to accepted practice.

Their final conclusion was that your bearing best met these requirements; that it was based on correct principle; that the quality of material and workmanship, including inspection and testing was all that could be desired.

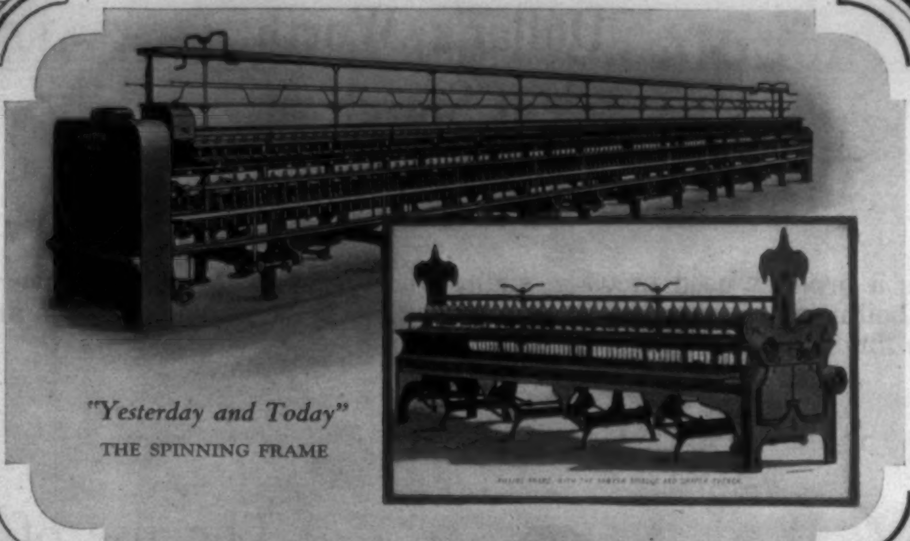
Our field experience with many thousands of your bearings and extending over several years has confirmed the correctness of our decision.

Yours truly,
G C Miller
President

GCM-J

WHITIN MACHINE WORKS

ESTABLISHED 1831



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THE SPINNING FRAME

TEXTILE MACHINERY

Today's Whitin Spinning Frame will show dollars and cents saving in production costs over *Yesterday's* Spinning Frame. There are bargain hunters, however, who close their eyes to this fact, buy second-hand machinery supposedly in good running condition, move it with the attendant costs, and begin then and there to pay handsomely for the experience.

WHITINSVILLE, MASS., U.S.A.

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A Means of Getting The
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Dollar's Worth
of Starch

ARCY is a product used in warp sizing and cloth finishing for converting ordinary thick boiling pearl starch into a soluble form, the solutions of which are transparent and remain fluid at lower temperatures.

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The use of Arcy means less net waste, where the mill takes advantage of the possibilities of using starch mixes of greater degrees of concentration. Starch is far cheaper than cotton.

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C&K
A Loom for every Woven Fabric
WORCESTER, MASS. U.S.A.

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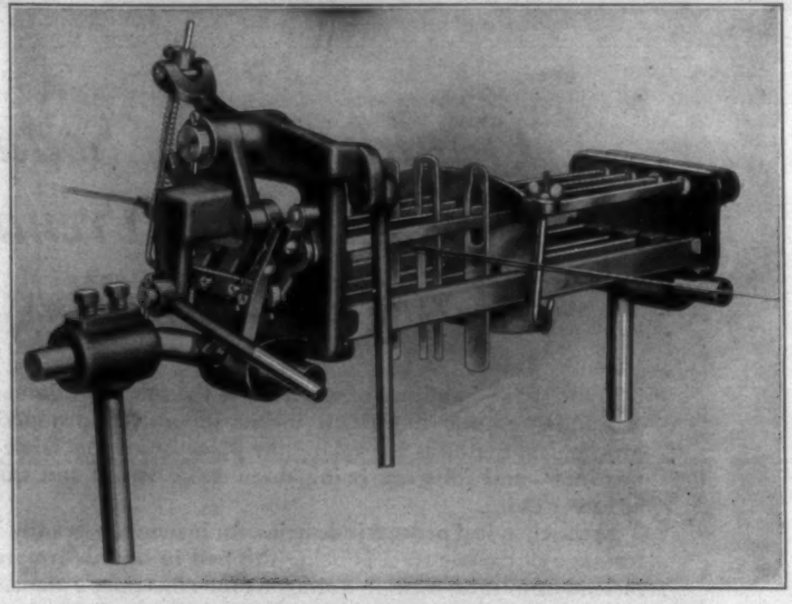

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Industrial Chemicals

Liquid Caustic Soda and the Modern Trend in Material Handling

EFFICIENT handling of materials is the subject of intensive study today as one important means of cutting production costs. Mechanical methods are taking the place of manual labor wherever possible—and jobs are being done more easily and quickly and at lower cost.

In the chemical process industries, for instance, a steadily increasing tonnage of caustic soda is being shipped in liquid form in tank cars instead of in solid form in drums. At the consumer's plant, the liquid is transferred into storage tanks entirely by mechanical means, thus eliminating the cost and inconvenience of unloading, handling and cutting open many drums, dissolving the solid caustic and disposing of the worthless empty drums. With 50% liquid caustic soda, the user need only dilute the liquor to the desired concentration for his processing operations.

This economy in handling is often sufficient in itself to make the use of liquid caustic attractive to large consumers. In addition to its handling economy, however, liquid caustic offers in many cases a very substantial saving in delivered cost over the solid material in drums.

Our new 8-page pamphlet on liquid caustic soda—Mathieson Bulletin No. 270—tells who may profitably use caustic soda in liquid form and how it is best unloaded, stored and diluted, together with other useful data for the plant executive and purchasing agent. A copy of this valuable Bulletin will be sent to interested consumers upon request to our nearest office.

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BICARBONATE OF SODA
MODIFIED VIRGINIA SODA
SODA ASH
BLEACHING POWDER
ANHYDROUS AMMONIA
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SOUTHERN
TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 18 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION $2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 3, 1897.

VOL. 32 CHARLOTTE, N. C., THURSDAY, JULY 28, 1927 NUMBER 22

Preventing Leaks in Mill Operation

By a Well Known Superintendent.

ONE of the great needs of the textile industry is to prevent the many leaks which can occur here and there in any mill. Stopping existing leaks is not acting soon enough. Leaks must be prevented in order to secure the highest efficiency. This is obvious and should hardly need to be explained. But here is the difference told in brief. Here is a mill which has allowed leaks to occur, and then proceeds to stop them. Here is another mill which has prevented the leaks, and never allowed unnecessary or abnormal leaks to occur. There is no question about which mill will be the most profitable of the two. Therefore it can readily be seen that there is a big difference between preventing leaks, and stopping leaks. The great need of the times is to prevent any undesirable thing from happening around a mill.

What are considered leaks around any mill? Anything in a mill is considered a leak which is wasteful. Most any mill has leaks which could have been prevented at the start or can be stopped now. But it would have been easier and more profitable to prevent those leaks at the start than to stop them now. In other words, it costs less to teach operatives to be economical than it does to train them to stop leaks. Once such habits are formed, the harder it is, and the longer it takes to reform the operatives.

What are many of the wasteful things which take place in our mills unless everybody is on the job?

Waste of Time.

The first great leak which takes place and which is more prevalent than other leaks in textile mills, is the waste of time. In a mill time is also money. The old saying that "Time is money" is right to the point. There are only 60 minutes in an hour. They are not elastic and cannot be stretched nor expanded. Only just so much work can be done within an hour's time by the best of workers. But not all workers are of the best and some of the most skilled do not always do the best. The short and the long of this is that in any mill there is more or less waste of time. The work is measured up against just so much time. It is a case of time against work, and the operatives are paid to accomplish just so much work in just so much time. It does not matter whether the work is day work or piece work. Time is money and the waste of time is the waste of cash. If a payday worker wastes time money is paid out and wasted on wasted time. If a piece worker does not do a full day's work, this worker, it is true, will make less pay, but the mill will also lose profit because of the lesser production gotten off by the slower piece worker. There are many ways of wasting time. A great deal of time is wasted at starting time morning and noontime. There is time wasted again during the last one-half hour of the forenoon and of the afternoon. Time is wasted by too much talking, too much going after drinking water, and too much loitering around sink rooms. Time is wasted going around the posts. So much time has been wasted going around posts that in the modern mill, posts have been put in less and less, and some mills have entirely eliminated the posts. It is now possible to build a mill 100 feet wide, one story high and miles long if desired, without having any posts in the construction. Some mills have been built in this way. This kind of a mill has been found easier to get around within. There is also less waste of light. It costs extra money to light posts instead of open space. There are no shadows in a postless mill. All of this saves time. It also costs more to heat posts than to heat open space. It also costs extra cash to paint and repair posts, etc.

Waste of Effort.

Every work or job requires effort to accomplish. It requires a certain number of minimum motions to piece up a broken end, to doff a frame, to oil, to clean and so on all through a mill. Not all of the operatives in a mill know all of the short cuts or how to make the least number of motions to piece up an end. Experts have found that it requires a minimum of 32 distinct or separate motions in order to piece up an end. It requires effort to perform these motions. This is called labor. Labor costs money. It takes really cold cash to pay for the labor and effort to make all of these motions. Now, if the operatives make too many useless motions, or make twice as many motions as is necessary to perform any service, then cold cash is wasted on wasted effort. It has been said of some operatives that they made so many false motions, and so much useless effort to piece up ends and to do other work, that they did very little work after all. In other words, they "worked hard all day and didn't do anything!" All goes to show that there are leaks not only in time wasted, but there are also leaks in the personal effort of both skilled and unskilled laborers. It behooves the supervisory forces to study into this important matter. There is the best way to do everything and not until the best way is found to piece up ends, and to perform all the other work in a mill. Not until then will all of the leakages be prevented or stopped in the waste of labor.

Waste of Power and Speed.

While there is a difference between the waste of power and the waste of speed, they go somewhat hand in hand. The "upshot" of this is that there is a waste of both in most mills. There is a waste of power when the machines are operated empty or with too many ends down. There is a waste of power when the machines are insufficiently cleaned or oiled, or when the machines are overloaded as is sometimes the case. There is the same waste of power when the machines are out of line, out of level, and out of adjustment otherwise such as having the gears set too deeply. Power is wasted again when machines are allowed to become "bunged up" with raw stock wound around the steel rolls when there are too many ends down. Operating the machines too fast.

The waste of speed is when the belts are not properly cared for. The power is there ready to do the service, but the speed is down because the belt is too slack or too light in weight. It probably takes just as much power, and possibly more, to drive slipping belts. But in this case the power is not only wasted, but the machines are not up to speed. It is also a waste of speed to operate machines too fast. It is a waste of speed to have the machines stopped longer than is necessary to doff, or when they are not started on time.

All of this costs extra money which is wasted on wasted power and wasted speed. The remedy is to stop or to prevent the above kind of leakages. The speeds should be frequently taken to find out the true status of things.

Waste of Oils and Greases and Other Lubricants.

There is not a mill anywhere which uses as little oil as is necessary for the proper functioning of the machinery. All mills use more oil than is needed. Some mills consume twice as much oil as is required to keep them sufficiently oiled. A drop of oil in the right place is worth infinitely more than a gallon on the floor. A bearing that has just enough oil on it will operate better than if there were a gallon of oil on it. It is awful the way oils are wasted generally among mills. Some oils are squirted hit or miss and some never touches the right spot. The remedy is to have the right kind of oil cans, and the right kind of help to use them.

Waste of Repairs and Supplies.

These two important matters also work together. It takes care, patience, skill and economical handling to prevent the wasting of repairs and supplies. While repairing machinery is quite a separate department and quite independent of the departmental uses of supplies, they are closely related. Oftentimes supplies are used too often when the machine should be repaired. Oftentimes a supply part should be used instead of repairing the part broken. It is wholly a matter of good judgment to decide what should be repaired and what should be supplied instead. Some mills have very good systems for following up and for checking up the repairs and supplies. The best systems are those which entail the numbering of each machine in the mill, and of charging up the time and the cost of repairing, together with a record of the cause of the breakage and what it is that was repaired.

Regarding the supplies, the best system is to charge these up to each section man. Some mills have done this for years and know what they are paying for. They have also prevented the wholesale leakages incident to the repair and supply departments. The supplies should be in charge of a competent store keeper who does not run away with the job, nor lets the job run away with him. He must be fair and square and fearless of those to whom he passes over the costly supplies.

(Continued on Page 34)

Yarn Defects and Their Causes

THE following points on uneven and faulty yarn are taken from a lecture by R. Belshaw before the Blackburn and District Mill Managers Association, of England.

Uneven yarn can be caused by bad buying and blending of cotton. The wise manager will have several marks of cotton in his mixing and he gets far better results than the man who only uses one mark. As most of you are aware a spinner may buy one mark all through the season in 12 monthly shipments but he has to depend on the cotton man shipping the right goods. Any deviation from the regular standard—and this happens pretty often—upsets the whole of his mixing and he gets into trouble with the manufacturers. The cotton may be dirtier, down in color, or irregular in staple, causing dirty, dull, or even yarn. The manager who uses several marks has a better chance of getting through for if only one mark out of four is down he generally manages to pull through, but, of course, he is to be pitied if all are down, but this would be very exceptional. The spinner has no redress when cotton is scarce. He has to take the cotton or stop his mill. If he goes to arbitration he will probably only get about 25 points on cotton, which is at least 100 points down. No spinner can spin allowances. What he wants is the cotton he has bought and he would rather pay differences for better cotton and have satisfied clients. A manufacturer can have a cheap yarn spun out of good staple which is fairly regular but he will have plenty of dirt with it. If he wants at the same price, the yarn will be brighter and cleaner but will certainly be more irregular. Cotton of good grade can be had as cheaply as dirty long staple cotton but, of course, the staple is much shorter and consequently the yarn is not as regular through being spun up. Uneven yarn is also caused by careless mixing by the operatives and constant supervision is needed to see that the different marks are mixed together.

There is no doubt the old stack mixing was, and is, very successful, but mills which put 100 bales per day down have not the room to use this system. Threads, string, and bits of tare which get broken up in the after processes are a fruitful source of uneven yarn and any amount of bad spinning has been caused by foreign matter getting mixed with the cotton. A large amount of cotton seed oil and machinery oil from the grinders and baling machines is found in the bales and if undetected is carried into the yarn and into the cloth.

At one mill a customer of mine complained about red spots appearing in his knitted garments and he said it must be coloring matter in the cotton. I went to investigate and found the yarn was knitted into undervests which had to be steamed to make them into unshrinkable garments. Nothing could be found on the yarn but the spots appeared after the steaming process. I suggested they must be marking the cones with marking ink pencils to prevent mixing of counts but I found crayons were being used, the marks from which would easily wash out. The following day I investigated at the mill and after considerable trouble I found that the tares on one particular mark of cotton had been marked with copying ink instead of the usual ordinary paint. Great care is always taken to pick all bits of tare and paint off the cotton when the bales are opened but, of course, a few marked fibres invisible to the eye, get broken up and spread a long way in the after proctsses. Under a powerful glass I found several red spots, invisible to the eye, on garments which had been steamed. These, during steaming, ran and spoiled the garments. On taking the matter up with the cotton people they said they had complained to the merchant in America about the bad marking of this particular mark of cotton and instead of using the ordinary paint which washed out, they had started using an indelible ink. This was immediately stopped and we have had no trouble since. Most of you will know how carelessly American bales are marked. The people across the water are not satisfied with marking the tare only, they must mark the sides of the bales where there are no tares thus staining millions of fibres. We had to meet the claim and after a great amount of trouble we managed to get one-third from the cotton merchant, which I claim to be a marvellous feat because the cotton man never admits any liability after cotton had been through a process. The poor spinner is always "getting it in the neck." If cotton drops he has to take his high priced cotton in, but the high priced yarn contracts seem to linger on his books. Too much soft waste must not be put back in the mixings or very short fibre used. These cause weak and irregular yarn besides making any amount of flat dirt and slubs.

In the opening and scutching room great care must be taken with the weighing of the laps and any laps more than half a pound out, must be sent back. Irregular and uneven wrappings and can easily get the spinner into serious trouble. Bad setting of the feed rollers and dirt bars, bad fan draughts, or unsuitable speeds cause dirty and irregular laps. The regulating motion must be kept spic and span and in good working order, and therefore must be cleaned regularly. The dampers should be dropped every two hours, the cages picked, and droppings taken out at least twice a day. If making several qualities of laps, see that they are marked with harmless crayon colors to prevent "mixings" in the cardroom.

Carding is the last cleaning process and the most important in the spinning mill. This machine should take out, if working well, nep, short fibre, dirt, leaf, etc. It mixes and blends the various staples into a very fine web and makes a thread possible. If the various parts are not well set, and if the wire be dull, this machine can ruin the best cotton and make it impossible to spin well. Wire that is rubbing and dull makes nep and instead of taking the dirt out, breaks it and passes it forward into the yarn. See that this machine makes a decent strip and takes out the right amount of fly or you will have serious yarn troubles. The Shirley Institute people have been experimenting with the card and they say they can get as good results from 13 flats working as from 40. I have my doubts about it, and I shall need more proof than they have shown up to now. Indian cottons card better than American cottons and American cottons better than Egyptians, or in other words, harsh cottons are easier to treat than soft cottons. Get as many cards as possible and card as slowly as possible and you will be amply repaid in your resultant yarn.

The drawing frame is a most useful machine and, of course, very important.

The sliver from the card is very irregular and very variable in hank but this machine makes the fibres parallel and through its doubling processes makes a sliver with only a few grains of variation. If the yarn wraps very irregularly, the spinner goes to the draw frame immediately. The spools for the knocking-off motion must be in perfect order or "single" will pass through, and when piecing up the tenter must not have too much lap over or "double" will result. This imperfect sliver is drawn out from 20 to 30 times its length in the after processes and you can easily see where a lot of fine or coarse yarn comes from.

The rollers must be set right or uneven yarn will be found and careless tenters, who do not pick the flats and under clearers regularly, cause any amount of slubs, etc. The carder should, at least, test twice per day for counts to ensure regular yarn wrappings.

The slubbing, inter and roving rollers must all be set correctly to the staple, or uneven yarn will be caused, and as little twist as possible must be put in these processes or bad drafting will result. The winding of the bobbins must be exactly right for ratched bobbins will cause weak and irregular yarn. The flat waste must be cleaned off regularly or we shall have slubby yarn and the tenter must be taught to creel properly—no long piecings or late piecings as these cause double and single. A few inches of faulty piecings means yards of irregular yarn from the mule or ring frame. Suppose we take a late piecing, say in the inter creel. This will make the yarn when it is drawn out in the mule 20's instead of 15's because the thin part of the inter rove it "doubled" in the roving frame creel with another inter bobbin and the two ends are drawn into one. As this is only 25 per cent single the ends keeps up and it is very difficult to trace this evil. Fifty per cent single would break down because of its weakness. Double, coarse, and slubby yarns are made by "caught" ends. When an end breaks down on the flyer frame, it generally flies on to the next end and is wound on to the bobbin. If the tenter does not take this off you can quite see where your slubs and thick ends come from.

Careless oiling and cracked bobbins cause oily yarns and these evils should be watched pretty keenly. The ring frame is a machine which must be kept very clean or a great amount of bad work can easily be caused. The spindles must be true and set in the centre of the rings or we shall have softly twisted bobbins and weak yarn. Softly twisted yarn or weak yarn is also caused by old and slack bands and the new tape drive which drives four spindes is a great improvement. To each tape is applied a tightening motion and the advantages of this arrangement are easily seen. Bad tin rollers also cause softly twisted yarns. A good anti-ballooning attachment is very necessary in these days of high speed and spinning up of cheap cotton.

This arrangement is not necessary when tip top cotton is used and you are spinning down, because a very heavy traveller can be used. A too light traveler causes soft bobbins and snarls, and if anti-ballooning motion is not used, allows the ends to lash into each other, causing bad spinning, breakages and doubled ends.

Bad spinning is no good to anybody—the spinner loses production, the workpeople are "fed-up" and get careless, making bad piecings, thick ends and slubs, etc. These, of course show up very much in the cloth.

The manufacturer finds very few faults in a yarn which seldom breaks down during spinning, but he gets any amount of faulty cloth from a badly spun yarn. If a manufacturer uses ring pirns for weft, he occasionally gets ridgy bobbins—this evil is principally caused by the operative allowing a broken end to keep down too long before piecing up. The ring frame is a continuous spinner, drafting, twisting and winding, all being done in one process, and though greater production can be obtained, it cannot spin as finely as the mule out of the same mixing. On the ring frame, each end depends on its own strength, and a weak end will break down immediately. But on the mule, the weak ends are helped by the strong ones, and, being an intermittent spinner, drag can be put in which, if rightly used, makes the thread more even. On account of the ring frame's individuality, we have to put more twist in that the mule, and we cannot spin as softly, and that is why some manufacturers prefer mule spun twist because they can get more size in. A manufacturer can have a soft spun yarn if he likes—the spinner is willing to oblige, but he cannot always get the necessary strength unless the yarn is spun down out of very good cotton. A lot of yarn faults would be eliminated if the cloth merchant would only pay the price to allow

(Continued on Page 32)

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No Terrell machine is considered as finally sold, until it has proved successful under actual mill operating conditions.

Nor will Terrell ever market or attempt to market a machine that does not give the service for which it was designed.

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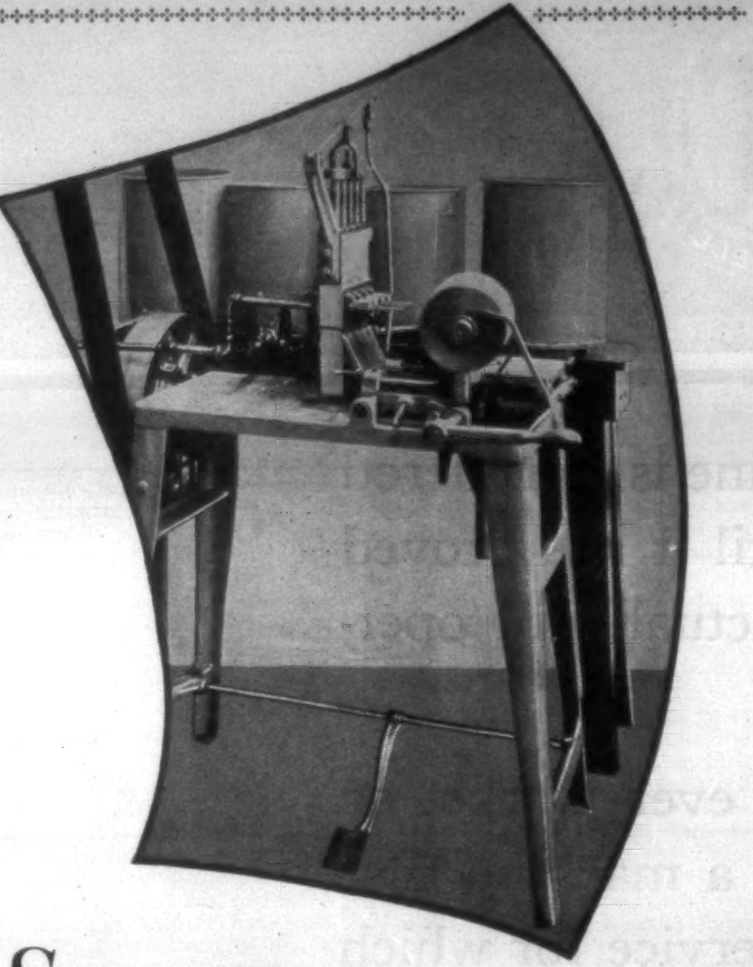

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You have four colors practically at the cost of one. That's because water is used instead of alcohol — water that gives the same results, the same through-to-the-core dyeing, the same fastness to light and washing. This new machine offers the cheapest method of random dyeing.

There are several more advantages that we would like to call to your attention. May we send you this additional information? Write us today.

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ECLIPSE

ECLIPSE—VAN NESS
Four-Needle Random Dyeing Machine

Activities of the Textile Institute

Hines Notes Disparity Between Cotton and Cotton Goods

Disparity between the trend of raw cotton prices and the prices of cotton goods is pointed out in the following statement authorized by Walker D. Hines, president of the Cotton-Textile Institute, Inc.

"Within recent weeks I have had occasion to point out that the prices of goods appear to reflect quickly any substantial fall in the price of cotton but respond with the most extreme reluctance to any advance in the price of cotton.

"This condition is illustrated at the present time—and has been for many weeks—in the case of wide sheetings, as is disclosed by an examination of prices prevailing in the cotton market and in the primary market for cotton goods during the last fourteen months. In May, 1926, when cotton was selling for 19 cents a pound, certain 99-inch sheetings were quoted at 56½ cents per yard. In November, 1926, after the extent of the record crop of cotton became known, raw cotton fell to 13 cents a pound and the same 99-inch sheetings dropped in price to 52 cents per yard. Similar price readjustments were made for other sheetings.

"Since last November the price of cotton has advanced to within striking distance of 19 cents a pound, (the spot quotation on July 20th was 18.35), while the list price of wide sheetings has remained unchanged, and the discounts from the list price have tended to be more pronounced than either in May, 1926, or November, 192. In other words, when the price of cotton fell 6 cents there was a very substantial fall in the price of sheetings, but when the price of cotton subsequently increased approximately 6 cents, the price of sheetings remained unchanged except to the extent that it fell still further on account of larger discounts. The manufacturing costs for cotton goods, aside from the cost of cotton, are as high as, or higher than in 1926.

"I believe the impression prevails in the trade that if the cost of cotton be figured at present prices, the cost of wide sheetings, generally speaking, is now substantially more than the prices at which sheetings are being sold. It follows that wide shetings will be generally produced at a substantial loss if the price of cotton in the fall approximates the existing price, and if we see a continuance of the recent tendencies, which seem to operate against the manufacturer getting back, on the average, the cost of his raw material plus manufacturing cost, to say nothing of a reasonable profit."

Plans for Sheeting Statistics

More than 90 per cent of the wide sheetings mills in the United States were represented at a meeting of the Wide Sheetings Group of the Cotton-Textile Institute, Inc., held in New York last week. Walker D. Hines, president of the Institute, presided and the following members of the group advisory committee were present: H. R. Fitzgerald, chairman, Riverside and Dan River Cotton Mills; K. P. Lewis, representing W. A. Erwin, Erwin Cotton Mills Co.; Edwin Farnham Greene, Pacific Mills; Ernest N. Hood, Naumkeag Steam Cotton Co.; Amory Coolidge, representing R. H. Leonard, Pepperell Manufacturing Co.; J. A. McGregor, Utica Steam and Mohawk Valley Cotton Mills; G. H. Milliken, Dallas Manufacturing Co.

Other mills represented included: Alexander Manufacturing Co., Androscoggin Mills, Dwight Manufacturing Co., Excelsior Mills, Fort Mill Manufacturing Co., Great Falls Manufacturing Co., B. B. & R. Knight Corp., Lockwood Co., C. R. Miller Manufacturing Co., New England-Southern Mills, Peerless Cotton Mills, Postex Cotton Mills, Wamsutta Mills, Columbus Manufacturing Co.

It was announced at the meeting that upwards of 95 per cent of wide sheetings production will be included in the statistical reports that will be compiled and disseminated by the Institute in behalf of the particular group. Details as to the statistical form to be followed were worked out at the meeting and the reports will be called for promptly and issued every two weeks. With practically the entire wide sheetings production included in those reports, it is felt that the situation affords an excellent opportunity to obtain much more complete and continuous information as to business trends in the industry.

Further steps were taken regarding a study of cost accounting problems in the group and an early meeting of cost accountants from the wide sheetings mills with the cost engineer of the Institute will be held with a view to working out a practical uniform cost system or systems for recommendation to the mills.

It was unanimously voted at the meeting that the advisory committee be requested to give the matter of sales contracts immediate consideration with a view to recommending to those engaged in the manufacture of wide sheetings, selling terms, freight allowances, etc., regarded as embodying sound principles of business practice.

Beattie Is Cost Captain

Walker D. Hines, president of the Cotton-Textile Institute, Inc., announced the appointment of S. Marshall Beattie, president and treasurer of the Piedmont Manufacturing Company, Piedmont, S. C., as a member of the Institute's narrow sheetings advisory committee to succeed the late Harry B. Jennings, of the Union-Buffalo Mills, Union, S. C.

Following this appointment, W. J. Vereen, chairman of the Narrow Sheetings Group, has designated Mr. Beattie as cost captain and announces that an early meeting of the cost accountants of the Narrow Sheetings Group will be held with Mr. Beattie in collaboration with George W. Duncan, cost engineer of the Institute.

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The difference between Great Britain and E. F. Houghton and Company is that Houghton is not equipped to use force at all. We know that the only way to hold our customers is to thoroughly satisfy them.

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Unquestionably, Houghton's Absorbed Oils are the best obtainable for use in the textile mill. They lubricate better, and at less than half the cost.

Every textile mill official in the world who has given Houghton's Absorbed Oils a perfectly fair trial has stuck to them. They are all **satisfied.** They keep ordering, ordering, and ordering. They tell their friends, the friends buy Houghton's Absorbed Oils, and then **they** become regular customers. All of which makes it clear why the sun never sets on E. F. Houghton & Company, does it not?

Have you ever tried these remarkable oils? Do you know that they are made up of TWO oils? One of the oils provides the necessary film to keep the metallic parts from making contact, and the other oil provides the slipperiness. It is the logical oil for textile mills. It **stays put.** Absolutely no staining of products. This latter feature alone is worth more than the cost of the oils to textile manufacturers.

Wouldn't you like to have a Houghton man call, without obligating you, and explain why these excellent oils not only lubricate better but why they do it at half the cost? He will be glad to do it.

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"*Shiners*" *and Loops In Rayon Filling*

In every mill we find altogether different conditions—atmosphere, workers, machines, patterns, cotton yarns—ali different, no two alike. So that things which are very serious in one mill are hardly noticeable in another and if we were to compare notes all would gain through such exchange of knowledge gained in the use of artificial silks.

In most cases the principal troubles are:

First—Shiners.
Second—Loops in filling.
Third—Frayed ends.
Fourth—Tight and loose ends.

With "shiners" we cannot get rid of them altogether as yet, but can reduce them so that there are very few. With non-automatic looms we have reduced them almost entirely by using an elastic webbing tape ¾-inch wide fastened to the base of the shuttle near butt end of bobbin and hooked at end of shuttle near eye.

One Difficulty.

Artifiicial silk is like fine wire when wound on a bobbin. If each traverse is held in place until the thread is pulled a little it will throw 6 or 8 turns when the shuttle suddenly stops in the shuttle box. These extra turns catching at the eye often make "shiners" because the thread is tight and lays in a straight line like a stick and does not allow the warp threads to bend it to form an even weave. These extra turns sometimes make a snarl and cause filling to break or the bunch pulls through and makes a bunch in the cloth.

This fluffing off, as it is sometimes called, is often caused by having too few turns to each traverse of wind. Some bobbins or cops have only eight turns from the bobbin barrel out and back again. We find that fourteen turns is a great improvement, as there is not so wide an angle of the end crossing the previous traverse, and one turn lies sort of between the ones below it. It says in place better so that not so much friction is needed in shuttle and the drag is more uniform.

Rayon and Automatic Looms.

With automatic looms we cannot use this sort of shuttle and find it more difficult to overcome. We have user several sorts of fur, but what we have found a little better is: Take about 3 threads of 30s warp yarn and dip it into rubber cement, working the cement well into the yarn, then pulling the yarn through the fingers to remove the surplus like a slasher does. Then bore about five holes ⅛-inch in diameter on the upper part of the front shuttle and about 1¼ inches apart and five more on top of back side. These holes are not to be opposite but alternate, pointing the drill downward toward center of bobbin. Pull all these threads through one hole and then across through the next one on the other side. Should be tight fit in the hole. Then cut midway or over center of bobbin. Do all the other holes the same way and you will find a very good durable friction that will not cause any damage. If too much friction is had a few threads can be cut off.

Another thing that makes "shiners" is when the shuttle pinches the filling against the binder once in a while, causing the filling to be tight. Set the binder stud at a slight angle so that the binder will press against the shuttle harder at the top than at the bottom. This condition would only exist on the left hand binder of an automatic loom as that is the side where eye of shuttle goes clear into shuttle box. It is also this pick from right to left side that has more friction or drag to filling. Then from passes through the grate, and if fill- left side to right we have filling fork that takes up a little filling as it ing is anyway tight that will make it more so.

On some looms we find that if there is a slight rebound to the shuttle we see no shiners. On some Draper looms there is little allowance for rebound, but if we can even get ⅛-inch it helps a lot. I have often stopped "shiners" by putting a small spring back of the picker stick so that the rebound is hardly perceptible. It allows the filling to lay limp in the shed. Also it helps to set the harness cams, or motion (whichever is lsed) as late as possible. There is less liability to thin places and cracks and filling lays more uniform in light or thin goods.

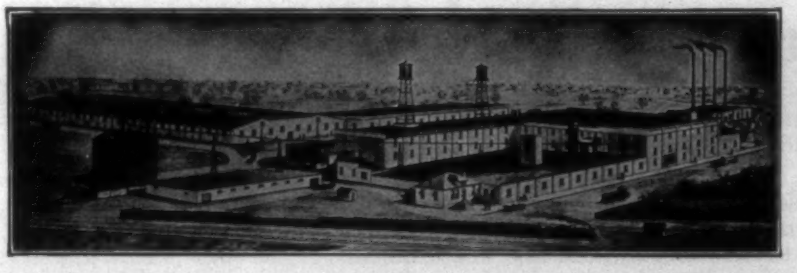
Loops in Filling.

As there are no loops in the filling as it comes wound on the bobbins or tubes they must form after leaving the bobbin. Sometimes the loops are not so numerous and escape the eye of the weaver operating a large number of automatic looms, but the sum total of them in a cut of cloth makes the problem serious and it is often a difficult matter to remedy.

One day four cuts of cloth were found by inspectors in the cloth room with this trouble, and the writer was sent for. As the overseer is always help responsible, it was found upon close examination that these loops varied in length —from ⅛ to ¼-inch long and they were found in all cases at the warp ends that were drawn in the fifth and

(Continued on Page 32)

VICTOR MILL STARCH – The Weaver's Friend



It boils thin, penetrates the warps and carries the weight into cloth. It means good running work, satisfied help and one hundred per cent production.

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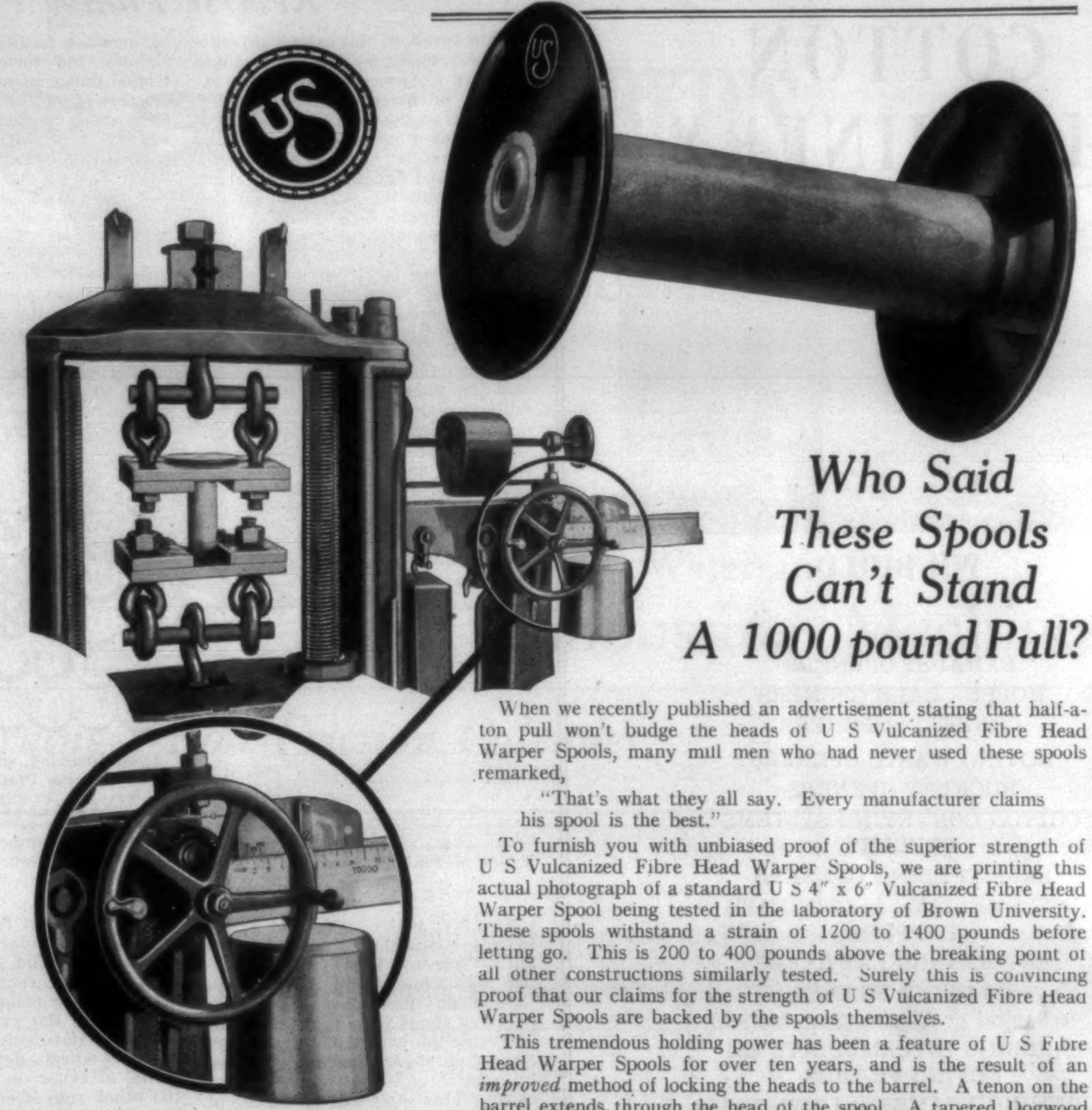

Who Said These Spools Can't Stand A 1000 pound Pull?

When we recently published an advertisement stating that half-a-ton pull won't budge the heads of U S Vulcanized Fibre Head Warper Spools, many mill men who had never used these spools remarked,

> "That's what they all say. Every manufacturer claims his spool is the best."

To furnish you with unbiased proof of the superior strength of U S Vulcanized Fibre Head Warper Spools, we are printing this actual photograph of a standard U S 4" x 6" Vulcanized Fibre Head Warper Spool being tested in the laboratory of Brown University. These spools withstand a strain of 1200 to 1400 pounds before letting go. This is 200 to 400 pounds above the breaking point of all other constructions similarly tested. Surely this is convincing proof that our claims for the strength of U S Vulcanized Fibre Head Warper Spools are backed by the spools themselves.

This tremendous holding power has been a feature of U S Fibre Head Warper Spools for over ten years, and is the result of an *improved* method of locking the heads to the barrel. A tenon on the barrel extends through the head of the spool. A tapered Dogwood Bushing is driven into the hollow end, forcing the tenon outward and locking into projections cut on the fibre heads (a special feature of the U S Spool). The wedge is bone-dry when pressed in and soon absorbs moisture to the normal content of wood and expands, making the joint between the head and barrel more solid than one-piece construction.

Consider the advantages of using spools with heads that will not warp in regular mill usage, come off or apart, crack or sliver. U S Vulcanized Fibre Head Warper Spools are so guaranteed in construction and are further guaranteed to give long service and satisfaction. These advantages coupled with the U S guarantee make U S Vulcanized Fibre Head Warper Spools a good investment even for the mill which buys strictly on price.

You want spools like these. Why not order yours today?

This laboratory test is typical of the many exacting experiments which our engineers conduct to maintain the high standard of U S products.

When we make a statement regarding U S Bobbins, Shuttles, or Spools, you can be sure that what we say is proven by tests and backed by the entire resources of this organization.

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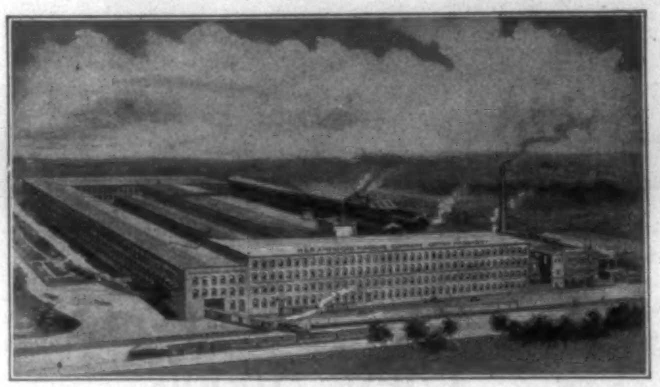

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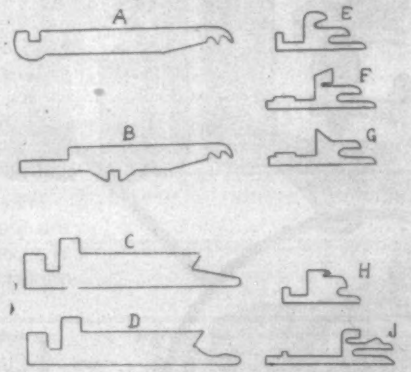
Reverse Plating

AS a result of the extended facilities offered by hosiery machine builders for reverse plating, the attention of manufacturers is being focussed on the possibilities of producing fancy designs by this means. Designs similar to those obtained by knitting and "floating" are producible without the disadvantages of floating thread or accordion stitch. In reverse plating there are no unnecessary lengths of yarn adding weight to the fabric, as, even when a yarn is not required to show, it forms an integral part of the fabric structure. On the other hand, to set against these undoubted advantages, there is inferior definition of pattern and the uncertainty of perfect results in plating.

Reverse plating is another and more comprehensive term for what has been commonly called sinker plating from the fact that, in the past, it has been done almost exclusively through the agency of sinkers.



Types of Sinkers used for Reverse Plating.

The first really successful patent in this connection is that brought out by Terrot in 1891 for sinker plating on French circular frames, though an interesting device was patented about 18 months before for reversing the yarn guides by the action of an electro magnet energized by means of a pattern wheel or chain. This early attempted use of the yarn guides as the patterning medium is of special interest in the light of modern developments.

At the present time reverse plated fabrics can be made on either a plain or a rib-knitted basis, but rib machines have not yet been constructed to do more than reverse threads at each half course, whereas the following types of plain stitch machines now have attachments for jlating loop by loop—

(1) French circular frames.

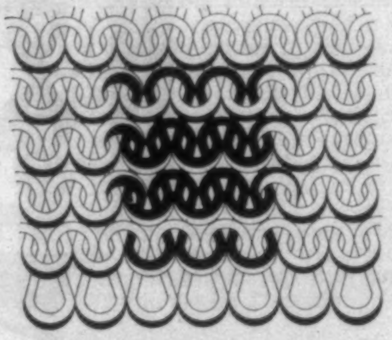
(2) Straight bar bearded-needle machines: Cotton's system.

(3) Automatic circular - knitting machines.

(4) Latch needle circular-web machines.

On French Circular Frames.

There are two different methods employed on machines of this type. The older method—the subject of the original patent—is to use two kinds of sinkers, ordinary sinkers shown at A and design sinkers shown at B. Each kind possesses two catches to receive the two separate threads, but as the control slots of the design sinkers are in a different position to those of the ordinary sinkers, the former can be controlled independently of the the latter through the agency of an additional cam disc fitted to the sinker wheel. Face and back threads are fed to the sinkers in correct relative positions, but the latter is fed first and the design sinkers catch this back thread and carry it down the stem and away from the head of the needle, so that the normal face thread comes nearest to the needle head at these points, and therefore shows only at the back of the fabric. Ordinary sinkers leave the threads in the positions in which they are fed. The designs produced depend primarily upon how the sinkers are set out in the sinker-wheel, which develops the pattern on the ordinary pattern-wheel principle. In order to avoid a pronounced pattern spiral when making figure designs it has been the custom to work with one feeder only.



Loop Drawing, showing back of Reverse Plated Fabric.

Within the last few years, on machines of a similar type though of a different build, mechanism has been fitted incorporating an endless metal band or ribbon to control the positions of the yarn guides. This band is positively driven by a sprocket-wheel device through a series of holes on one side, while the other side is cut to manipulate the yarn guides according to the design required. By this means the patterning area can be considerably enlarged and, if provision is made for a sufficiently long band, the pattern spiral can be entirely eliminated.

On Cotton's Patent Frames.

For reverse effects on this type of frame sinkers are used as shown at C and D, the latter where the threads are to be reversed. Two yarn carriers are employed, one having a lead over the other in either direction of motion. The leading carrier lays what normally becomes the face thread, but during the looping action the design sinkers alter the relative positions of the two threads, bringing the thread of the following carrier to the front of the fabric. Designs producible in this way are necessarily restricted to those of a straight character, but used in combination with horizontal striping attachment tartan and check effects can be made, suitable for legs and insteps of full-fashioned hosiery.

Quite recently reverse plating has been exploited as an alternative to

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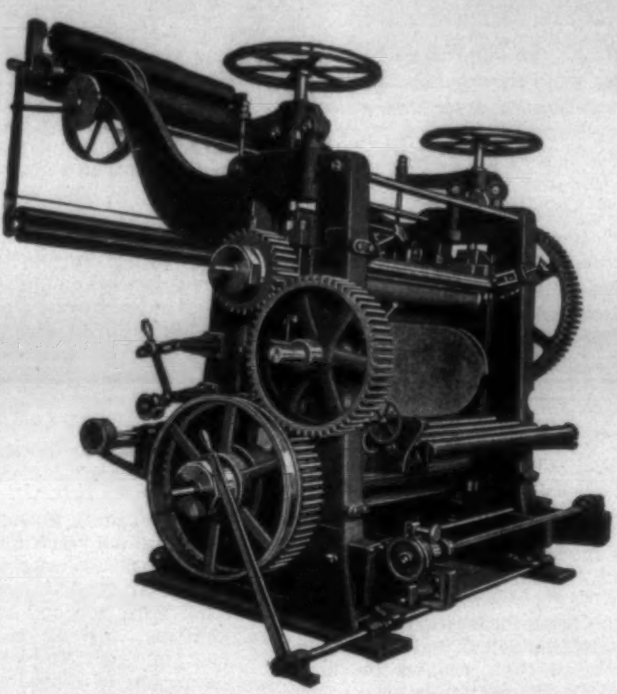

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Practical Discussions By Practical Men

The Practical Discussion Department of the Southern Textile Bulletin is open to all readers whether they are interested in seeking information on technical questions or are willing to help "the other fellow" who has experienced trouble in some phase of his work.

The questions and answers are from practical men and have often proved extremely valuable in giving help when it was urgently needed.

The interchange of ideas between superintendents and overseers develops a great deal of worth while information that results in much practical benefit to the men who are concerned with similar problems.

You are invited to make free use of this department and to join in discussing various problems that are mentioned from week to week. Do not hesitate because you do not feel that you are an experienced writer. We will take care of that part of it.—Editor.

Manufacturing Costs on Twine.

Editor:

We are manufacturers of cotton wrapping twine using about 5½s or 6s yarn. We are not in intimate connection with mill centers and have no opportunity of comparing the costs with other manufacturers. If you can give us any information about the manufacturing costs of this class of goods, we will appreciate it very much.

We use in our twine, cotton grading about good ordinary and our mill is operated by steam power.

R. W. A.

Trouble with Peruvian Cotton.

Editor:

I would like to ask the following questions through your discussion pages.

I am spinning 70s combed yarns from 1 3-16-inch strict middling American cotton and am also spinning 70s combed yarn from 1 3-16-inch staple A, Peruvian Tanguis cotton, both under the same manufacturing conditions.

The finished yarn from both the Peruvian Tanguis and American appear to be very even, but the yarn from the Peruvian Tanguis cotton appears to be weaker in breaking strength than the American cotton and runs very badly in the spinning process.

Will someone who has had practical experience spinning 70s combed yarns from 1 3-16-inch grade A Peruvian Tanguis tell me why my spinning won't run.

W. W. T.

Top Roll Weighting.

Editor:

I would like to get some information as to how to figure the distribution of the weight on the top rolls of my spinning frames. Will some expert please outline an example laid out for coarse work?

Cotton.

Answer to S. C.

Editor:

Well, my boy, 110 per cent production is what causes the cotton mills of the South to have to stop so much in the summer time. If we had more stringent laws regarding the hours we are supposed to run, and stick to them, we would be able to run the full 12 months. There are mills that start their machinery at 5:30 a. m., Monday morning and never cut the motors loose until 11 a. m. Saturday. They claim they are getting off 115 per cent production per week; but they are operating their machines 125 hours per week. All book production is based on 60 hours for North Carolina, and 55 for South Carolina. If you take any machinery catalogue you can see at a glance what the production of a machine is under very favorable conditions. If you get it every week you are in the front rank. When you hear of some one getting 110 per cent production, he is only displaying his ignorance. There is no such a thing. Every whole has 100 parts, no more or less, which equals 100 per cent.

Old Top.

Answer to Learner.

Editor:

In answer to the question by Learner will say that his trouble is caused because the rollers are not properly weighted and spaced the proper distance for the weight of the sliver going through the drawing. His drafts appear right according to the weight of the sliver, 50 grains.

To begin with, he should take out all top rolls and examine the gears on all bottom rolls. See that fit tight and that they are properly set and that rolls are set to suit the stock. If he is working low grade short cotton, he should set as close as he can. If the stock is good, he will need more space between the front and second roll.

Put in the top rolls and see that the makers name is all to the left or to the right so they will all be alike. Now examine the weights and see that the heavy ones are at the back. After he has gone over the frames carefully I think he will find an improvement in his work. Last but not least the trumpets should be the same size, not too large or the slivers will be stretched between calender rolls and front rolls.

Old Top.

Answer to "Miss."

Editor:

Spraying raw cotton with water is beneficial, only, to a limited extent. The idea is an old one, having been abandoned many years ago, because of the fact, that water evaporates, thus defeating the primary object namely, to afford lubrication and prevent the dust from flying about the mill. This is evident from the fact that humidifiers are used in a cotton mill to saturate the atmosphere with moisture in an effort to prevent the evaporation of water from the cotton fibres. It is reasonable to assume the raw cotton contains its normal amount of moisture when the bales are broken. If this moisture can be retained through the entire process of manufacturing the cotton into yarn, it is apparent no advantage could be expected by adding more water or moisture by spraying the cotton before it reaches the cards.

The oil spraying system is the latest development designed to add the proper lubrication, reduce the dust, lint and fly. It practically eliminates static electricity and makes the cotton work better through the mill. If your cotton has a normal amount of moisture when opened and the oil is sprayed, just after the cleaning process, the moisture will be retained to a great extent. This is due to the nature of the oil and to a well known law of physics, that when two liquids are mixed, one will have a tendency to lower the evaporating point of the special oil, being so high, it prevents the evaporation or I might say holds the moisture in the cotton. In regard to proper lubrication, the oil being non-drying stays with the cotton through the rpocesses of machining. In other words the "Oil stays put" while the water does not.

Linnwood.

Answer to Cotton.

Editor:

Is there a machine for stapling cotton? Yes; there is a good one made by a cotton research concern in Boston. One of the largest cotton manufacturing plants in the United States uses one of these instruments in their laboratory. The cost of making one of these machines is said to be upwards of $200.00. This seems rather high; as there is not much to one of these instruments.

It merely consists of two pulleys carrying a narrow black velvet ribbon upon which the cotton staple may be deposited afer it has been drawn out by a pair of drawing rolls placed at one end of the ribbon. First, the tuft of cotton to be tested must represent the cotton wanted or purchased. It must be prepared by hand in the same manner as when pulling by hand. Only instead of pulling by hand, the prepared tuft is fed into the bite of the drawing rolls. One set of rolls hold it while a second set draws out the longer fibres, and deposits them on the traveling black velvet ribbon. The second feeding-in will draw out the next longest fibres. These operations are repeated until all of the fibres in the tuft to be stapled has been drawn out and placed on the ribbon. Then, at a glance, the average length of the staple may be struck.

This machine does nothing more than an expert can do by hand, but where a large amount of cotton is handled in a very large plant this instrument will do the work more rapidly and more accurately than the average man can do by hand.

Adviser.

Answer to Western.

Editor:

Western wants to know how to make a banding machine. This may be easily done by taking a one inch piece of shafting 12 inches in length. Starting with one end of this piece of shafting, slip on a 2-inch ball bearing; one tight and one loose pulley; 4 inches of diameter and each pulley to have a 1¼-inch face. Now slip on another ball bearing, also a one inch set-collar. When these parts are assembled one one end of the 10-inch shaft, and this head is secured to a plank 12 feet long, 8 inches wide and 2 inches thick. The assembled parts on one end of the shaft will take up slightly over 7½ inches of the 12-inch shaft, after making sufficient allowances for clearances and easy movement of the shaft in the bearings, also the loose pulley, etc., without binding. This will leave over 4 inches of bare shafting. On this end of the bare shaft, put on the following equipment:

Two separate blocks of brass, one inch thick, 2 inches wide and 4 inches long. Bore 3 1-inch holes into these 2 brass blocks. One hole to be in the middle, and one on each side of the central hole, so that when a gear is placed on the 12-inch shaft, it can mesh into a gear on each side when the side gears are each mounted onto 3 inches long journals 1-inch diameter which will pass through the holes in each end of the brass blacks.

Now, slip onto the 12-inch shaft, one of these brass blocks; passing the shaft through the centre hole. Next, slip on a gear which will be pinned to the shaft. Slip into the side holes the two 3-inch long journals in the middle of each shaft to which one other pinion gear will be fastened. Now, slip on the other brass block and bolt the two blocks together. These two blocks together with the one gear on each side of the central gear on the central shaft will now be able to be easily revolved on the main shaft and around the central gear. On each end of the side journals insert a hook. Have a catch made so that the brass blocks cannot turn only when catch is released.

On the plank arrange a sliding

block at the opposite end from the head, and on which a hook must be placed.

String the machinery in with the material to make bands. Start the machine, and when the first twist is sufficient in the two strands, arrange to have the sliding block on the fast end of the plank to trip the block which prevents the brass blocks from turning. Immediately the brass blocks will revolve on the main shaft and put in the reverse twist into the band.

When the band is sufficiently twisted, the sliding block on the plank may come into contact with a knock-off trigger, and stop the machine automatically. This will make a very simple automatic band making machine, and every band will be uniformly made.

The sliding block, on the plank will have a weight of about 5 to 10 pounds hanging to same. This will stretch the band so that thev will not stretch after put on the spindles.

Presto.

Answer to Reed.

Editor:

Answering Reed's question regarding odd and fractional sizes of loom reeds made. Will say that not many mills use fractional sizes of loom reeds. A few mills do use them. The writer knows of a large system of fine goods mills that extensively use fractionally numbered reeds. For example, if they have n order for cloth which calls for 67 ends per inch in the cloth, at the loom, they will order reeds with 31 43-100 dents per inch. They will probably arrive at this reed number by deducting one from the 67 (ends per inch wanted) and dividing the remainder by 2 1-10—if there are to be two ends in each dent of the reed. Example: 67—1=66÷2-10=31 43-100.

Dent.

Demonstrates Wood Top Rolls

IN order to demonstrate the advantages of wood top rolls on spinning frames, Washburn, of New Bedford, Mass., has recently installed a demonstration room and test laboratory, where mill men may see the wood top rolls in operation.

A Whitin spinning frame, in installed in a room constructed for the purpose. The frame is full size in all respects except in the number of spindles it contains: It has only 48 spindles as compared ith 250 to 300 spindles on many of the latest type frames, and is designed for demonstration purposes.

These wooden top rolls are not new to the textile industry. They have been in use for seven or eight years, in mills here and in other textile centers throughout New England and to some extent in the South. There are nearly two million spindles now equipped with them, according to the records of the makers.

The manufacturers give the following statement of advantages claimed for these rolls:

Make Frames Readily Flexible.

"1. They increase the flexibility and versatility of the spinning frame on which they are used. The frame can be changed over from coarse to fine yarns very quickly and easily, merely by changing the size of the roving used and the gears which govern the speed of the rolls. The setting of the rolls,—i.e. the distance between them,— remains unchanged no matter whether frame be running on 12s made from cotton having a staple of one inch, or whether it be operaton 120s yarn made from cotton having a staple length of 1⅝ inches. Without the use of suitable self weighted middle top rolls, it is necessary to change the setting of the rolls each time any substantial change is made in the staple length of the cotton used, and the time consumed in changing the roll settings is so great that the frames must necessarily be out of production for considerable periods. The use of Washburn wood top rolls eliminates most of the cost of these changeovers from one yarn size to another, and avoids the attendant loss of production.

Increase Strength of Yarn.

"2. Through better control of the fibers, as they are presented to the front or drawing pair of rolls, the use of the wood top rolls results in a marked improvement in evenness and breaking strength of the yarn, such as can not be obtained under the old system using heavily weighted middle top rolls.

Used for Long Draft Spinning.

"3. Very substantial economies are being accomplished through the use of Washburn wood top rolls in a modified system of long draft spinning. It has been possible to eliminate one entire drawing process, by this means, while at the same time obtaining, with identically the same kind of raw cotton, a greater breaking strength in the yarn. It is claimed that many mills are getting satisfactory long draft spinning results with the attendant economies involved, merely by the judicious use of these lightweight middle top rolls, at a small fraction of the usual installation cost for new equipment."

Several mills in New Bedford, Fall River and other parts of New England have already taken advantage of these facilities and have submitted yarns and roving for tests. One mill was spinning 36s yarn with a draft of 12 from 6-hank double roving, producing yarns sizing 35.00 and having 45¾ pounds breaking strength.

"We spun 36s yarn from their 2 hank single roving with a draft of 18 producing yarns sizing 35.25 with a breaking strength of 46 pounds," says H. L. Ray, who has charge of the work.

"Another test we have made was in spinning 40s yarn out of 1⅛-inch staple cotton for a mill which was using 8 hank double roving and producing yarns with a breaking strength of about 40 pounds. We substituted 6 hank double roving for the mill's 8 hank and used a draft of 13.30 instead of their 10 draft, and produced 40s yarn with a breaking strength of 43 pounds,— three pounds greater than the mill was getting and we used a much coarser roving to start with."

SHAMBOW
Solves Another Problem

If you are weaving off paper tubes or cops, you have probably experienced considerable trouble caused by the variation in the diameter of the tubes. Your spindles hold one tube perfectly, then the next tube is either too small to go on the spindle—or so large that the spindle won't hold it firmly.

The type of split spindle that is being used is sometimes packed with leather to hold tubes with over-size diameters. This helps some, but the strain frequently causes the spindle to break.

The spindle we make and recommend will take any size cop—will allow for all variations, and because of its construction, does not injure the tubes—they can be used over and over again.

Write us for samples—without cost or obligation.

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Visiting Europe

(Continued from Last Week)

By David Clark

On Friday, June 17th, I ate breakfast very early and Dr. Segre of La Soie de Chatillon called for me about 7 a. m. and we went by street car to the railway station, where he purchased tickets for Vermicilli, Italy, at which point the newest rayon plant of the La Soie de Chatillon is located.

As the train was not crowded, we had a compartment to ourselves and I had an opportunity of asking many questions and learning much about Italy.

I was especially interested in his explanation of the Facisti government under Mussolini. He stated that there were two forms of government, one being from the bottom up and the other from the top down.

That of the United States is described as "from the bottom up," that is, the people eelct their legislators, governors, presidents, etc.

The Facisti form that now rules Italy is "from the top down," that is, the Facisti party elects its premier, who at the present time is Mussolini, and he appoints the chief officers of the government, including the mayors or rulers of the cities, and they in turn appoint the men to fill the various positions under them.

The Facisti government has worked very well in Italy up to the present time. I doubt seriously that it will continue.

I was very much surprised at the attitude of Italy towards war, as it seems to me that they are preparing for and hoping for another war.

Mussolini has put a tax on bachelors and is proposing to put a tax on married people without children. He is also doing all possible to prevent emigration to America from Italy.

Mussolini says that Italy must be prepared when the next war comes and that there must be man power.

The toast of Germany, for a generation, was "Der Tag," meaning "The Day" of "The Next War," and she paid an awful price for that spirit.

Italy will not always be ruled by Mussolini, but if he means what he says he has her riding for a hard and terrible fall.

I have an idea, however, that Mussolini does not want or desire war but see in the idea an appeal to the Italian pride that helps him keep his seat in power.

Soon after we left Milan we came to the great rice growing area and everywhere could be seen long rows of men, women and children getting the grass and weeds out of the rice fields.

Rice grows in fields that are irrigated and the work in the fields has to be done in wet, boggy fields.

The laborers form themselves in long rows and work slowly across the fields. As they have to stoop over as they dig out the weeds and grass and their feet are always on wet ground, it appeared to me to be very hard work, but the Italians are accustomed to hard work and do not seem to mind.

A little further along I noticed long rows of trees which had been cut off about five feet from the ground and on which new branches had come out. Some rows of trees had leaves upon the branches while others had been stripped.

I learned from Dr. Segre that we were in the silk worm area of Italy and that they were Mulberry trees.

It seems that the farmers keep the silk worms at their houses and feed them twice per day, during the growing season, with mulberry leaves. Twice each day the farmers go to the mulberry trees and strip enough leaves to feed their silk worms. The number of silk worms a farmer can keep depends upon his number of trees.

Italy has a great silk industry; in fact, I think Dr. Segre said to me that it was the largest industry in Italy.

Italy has no coal or iron and very little raw materials of any kind, and the silk worm industry is very favorably situated and is a great asset.

On reaching Vermicilli we were met at the station by M. Debaillon and driven to the plant about a quarter of a mile away, and at the plant the superintendent or manager, M. Bauduin, showed me over same, accompanied by Dr. Segre.

The buildings are new and exceedingly well arranged and several of them were in course of enlargement.

The La Soie de Chatillon is said to be the second largest manufacturer of rayon in Europe and have several plants in different parts of Italy.

The plant which I visited was not one of the largest but is probably the most modern.

As I went from the office to the first building, I noticed over in one corner of the yard long sheds with bicycle racks but with the exception of the office car there was not an automobile around.

Workers in Europe do not own automobiles as they do in this country, but go to work on bicycles.

Their wages are much lower than in the United States and in every country the tax on automobiles is so high as to be almost prohibitive.

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The La Soie de Chatillon do not use linters in the manufacture of rayon but use wood pulp, which comes to them very largely from Norway and Sweden.

I had had the idea that wood pulp came to the rayon manufacturers in the shape of blocks of wood but found that they received it in sheets that look like blotting paper. The sheets are about three feet square, one-quarter inch thick and have been bleached white.

These sheets are chemically treated and then ground very fine. The pulp is treated with sulfuric acid and other chemicals and is cooked in large vats. They have recently installed an equipment which reclaims the sulfuric acid and results in a great saving in money. The reclaiming equipment consists of a large number of vats but operates with practically no attention or labor.

The cooking of the wood pulp has to be done very carefully and scientifically and they have an immense number of temperate recording and controlling devices.

When the mixture is right it passes to the spinning machines and then after the rayon is spun by being forced through orifices it is wound into skeins and is washed and treated and dried.

Dr. Segre explained the process of rayon manufacture as being very similar to the manufacture of raw silk by the silk worm.

The silk worm chews up the mulberry leaves, masticates them and with the juices and heat of his body cooks them into a mass which later he squirts through his teeth in the form of filament which come together and form a silk thread.

The rayon plant takes wood pulp and chews or grinds it into a mass which is treated with chemicals and cooked and then it is squirted or forced through fine orifices and comes out in the form of a thread.

After the rayon is spun and washed and is apparently ready for the market, it has to be very carefully inspected and sized, and I was surprised at the large number of employees that were required for the inspection alone, but Dr. Segre stated that grading and inspecting was a matter of extreme importance.

In the South we seldom hear of any rayon except 150 or 300 denier, but I found that La Soie de Chatillon manufacture regularly about twenty sizes and that some countries call for many of them.

I made notes of many other interesting features of their method of rayon manufacture, but unfortunately misplaced them and have had to write this rather incomplete description entirely from memory.

We reached Milan on the return at 12 o'clock noon, and after thanking Dr. Segre for his courtesies, I bid him good-bye at the station and took a taxi for the Continental Hotel.

Mrs. Clark and the other three members of our party reached the hotel about the same time, from a sight-seeing and shopping tour and were loud in their denunciation of the prices that had been charged them for a trip over the city and those asked by merchants when they sought to buy.

Having to leave on the 1:20 p. m. train, we went into the dining room for a very quick and light lunch and got what in New York would have cost 50 cents or not more than 75 cents each. When we received the check it was in Italian money the equivalent of $2.75 and on top of that they had added a service charge of 15 per cent.

In Europe it has always been the custom to give tips equivalent to 10 per cent of the bill, but they added 15 per cent to our bill and we had no redress.

When we paid our hotel bill we found that htey had not only added 15 per cent but at least three taxes which they claimed to be required by the city and government and even after we had paid the 15 per cent service the employees gathered around our departing taxi with indications that they would not refuse a tip but not a coin did they get from us.

The taxi overcharged us and the porter who carried our grips from the taxi to the train robbed us, but we had barely time to catch the train and had to pay his price.

We had purchased first class tickets from Milan to Vienna, but on the train all of the first-class compartments and most of the second-class compartments were filled and we had trouble in getting any seats and I stood for at least one hour in the narrow passage that runs down the side of the car.

Ham Jones wanted to refuse to give up our tickets until we got the first-class seats that we had paid for, but I convinced him that we could not make the conductor understand what we were talking about and that if they put us off we would be in worse shape than riding second-class on in a passage.

Later some people got off the train and we found seats and we also met on the train a party of Rotarians from Michigan and the trip turned out better than it had looked.

About 4:30 we reached Venice, Italy.

Venice is one of the oldest cities in the world and is generally regarded as one of the most beautiful. Instead of streets it has canals and you go from place to place and from house to house on boats or gondolas.

Venice is rich in real history and many books and stories have been written around her. I believe it was the scene of the story of "The Forty Thieves," but am convinced that they really existed, for I am sure that I personally met many of their descendants; in fact, from the number I encountered it seems that the original forty must have been a very prolific race.

Emerging from the station upon the banks of a canal we encountered pandemonium as the result of the solicitations of the gondola men. We had been warned not to let any of our baggage get out of our sight and it was a hard job to watch our baggage and at the same time decide which robber should convey us to our hotel.

We finally surrendered to one loud mouthed fellow only to later

(Continued on Page 26)

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Industrial Cleaning Materials and Methods

The Fine Points of Carding

A Series of Articles Contributed to a Prize Contest on This Subject

Contest Ends

The contest for the best article on "The Fine Points of Carding," comes to a close with the publication of the last three articles this week. This contest has been running for several months and has created a great deal of interest.

The judges will be asked to make their decisions as promptly as possible and it is hoped to publish the names of the prize winners at an early date.—Editor.

Number Forty-six

I wish to give the following on Fine Points in Carding:

See that card is level and lined. When clothing a 27-inch doffer, measure off 76 inches. Start taper toward end, allowing 13 inches between each row. Pull clothing on at 250 pounds pressure.

When clothing 50-inch cylinder, measure 144 inches, allowing 18 inches between each row and pull on at 350 pounds pressure.

Grind heavy every three weeks. Grind flats every six weeks. Keep card clean and well oiled.

Set card as follows: Feed plate to licker-in .010; mote knives to licker-in, top .012, bottom .010; licker-in to cylinder .010; back plate bottom edge to cylinder .022; top .024; front plate .027; stripper plate to cylinder, bottom .027, top .060; flats to cylinder .010; cylinder screen to cylinder, front ⅛-inch, middle .034; back .022; flats to cylinder .010; doffer to cylinder .007; comb to doffer .012; combs to flats .012.

A. R. P.

Number Forty-seven

The functions of a card are the most important things in a cotton mill. If cotton isn't carded properly we will have bad running work all the way through the mill. Not only will we have bad running work but a very dirty inferior product.

A very important thing about a card is to always have it level, because that is the only way to get the proper settings. Another thing, all parts that require oil should get it properly, as this will eliminate wear and also make working parts run smooth.

Cleaning a card depends on the grade of cotton we are running and our finished product. We all know that if we are running a very low grade of cotton making coarse yarns it will require more cleaning than if we were running a good grade of cotton making fine yarns.

A card should be stripped at least three or four times every day. While stripping, at least four cards should be stripped before the end is put up again. By so doing, the cylinder and doffer has sufficient time to fill up again. In this way a lot of uneveness in roving and yarn is eliminated. Another thing that will cause unevenness, is a card hand lapping over too much when he is laying down his laps or carelessly placing the end of the under the feed roll, thereby making a bad end in front.

The clothing on both cylinder and doffer should always be tight and if wires began to come out of the clothing they should be reclothed. The same applies to flats. The licker-in should always be sharp, as a dull one with many bruised places on it will let a lot of foreign matter pass that should be taken out. The screens should be examined at every grinding to se that no ribs are broken. And should be taken out at least once a year if for no other purpose than to clean thoroughly. All brushes should be kept in proper condition.

A card should never be run to an excessive speed. With a high speed we cannot get as good work from a card as we would get if the speed was low. All mills should be equipped with a sufficient number of cards so as not to card over 500 pounds per card in 55 hours. Drafts have been discussed quite a lot, as to which gives the best results, a long or short draft. Personally, the writer thinks that a draft around 120 is good, as we always have obtained the best results with this.

The most important thing about a card is that it must get the proper settings to make the best work. This depends on the grinder. Good card grinders are not born every day. Some men naturally have the proper touch or feel (so to speak), others learn it from hard work, still others are driven to it by their overseers. Only an honest truthful man should ever be allowed to grind unless the overseer checks up on his work when he is setting up a card.

A card should be ground every twenty working days and allowed to grind from eight to ten hours, unless clothing has been bruised some way and then it should be ground until smooth all over the surface and the

(Continued on Page 28)

Leatheroid

Solid substantial and lasting, because of a combination of material and construction which has been developed out of nearly half a century of receptacle building experience.

The name Leatheroid covers a complete line of all types of receptacles used in factories, mills, warehouses, etc., for transporting and storing raw materials, parts, cuttings, scraps and waste.

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Member of Audit Bureau of Circulations
Member of Associated Business Papers, Inc.

Published Every Thursday By
CLARK PUBLISHING COMPANY
Offices: 18 West Fourth St., Charlotte, N. C.

THURSDAY, JULY 28, 1927

David Clark	*Managing Editor*
D. H. Hill, Jr.	*Associate Editor*
Junius M. Smith	*Business Manager*

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The Probable Yield

We have often pointed out that there are only two real factors in the size of a cotton crop: first, the number of acres, and second, the lint yield per acre.

The recent Government report shows that 42,600,000 acres are planted, and allowing for less than the usual abandoned acreage, we can assume 41,500,000 as the number of acres to be harvested.

The average lint yield per acre harvested during the past six years has been:

	Lbs.
1921	124
1922	141
1923	131
1924	157
1925	167
1926	181

The years 1921, 1922 and 1923 were boll weevil years. The year 1924 was fairly dry and there was diminished boll weevil activities.

The years 1925 and 1926 were dry and resulted in very small boll weevil infestation.

If the acres harvested in each of the years from 1921 to 1926, inclusive, had been 41,500,000, as is the case this year, the crops would have been:

	Bales
1921	10,882,000
1922	12,267,000
1923	11,397,000
1924	13,657,000
1925	14,528,000
1926	15,745,000

The above shows that if we harvest 41,500,000 acres the crop based upon the yields of the past six years will be between 10,882,000 and 15,745,000 bales.

We can see no reason to expect the record breaking yield per acre of last year, which was produced as the result of unusually favorable weather, a large amount of fertilizer and practically no boll weevils.

If we drop to the next largest yield per acre we would only have a crop of 14,528,000 bales, which, however, was very largely the result of an absence of boll weevils.

There is no use shutting our eyes to the fact that boll weevils are back this year and that in many sections the infestation is greater than at the same date during the worst boll weevil damage years.

We have 42,600,000 acres planted and can not be expected to harvest more than 41,500,000.

Under present conditions how much cotton can reasonably be expected from 41,500,000 acres?

The above figures are only intended to throw light upon that question.

New England Mill Liquidation

The question of the liquidation of cotton mills continues to be a very vital and live one in New England, and we note the following editorial expression in the Boston News Bureau:

> "It is generally conceded that only the very exceptional Northern producer of coarse cotton goods is going to survive the bitter competition of Southern mills. But why should New England mill stockholders throw up their hands over the chances of successfully manufacturing fine goods?
>
> Liquidation would seem to be a rather timid policy, but Lyman directors believe by such liquidation $165 a share can be realized and they are apparently tired of looking at red ink figures and are perfectly willing to pass the job of running the mill to others.
>
> It is folly to make goods that cannot be sold at a profit, but is there not merit in the suggestion that fine goods prospect is not so hopeless as to warrant scrapping the whole enterprise?

New England still clings to the idea that fine goods can not be successfully made in the South.

It is true that the South has more advantage on coarse goods, but it also has an advantage on fine goods and they not only can but are being made successfully and cheaper in the South than in New England.

The directors of the Lyman Mills are business men who were elected to look after the interests of the stockholders of that company.

When the company could operate so that the holdings of the stockholders were increased in value each year, it was logical and business-like to continue to operate.

The object of operating the Lyman Mills was not to make cloth but to make profits for the stockholders.

When the process is reversed and the directors of the Lyman Mills find that each year the holdings of the stockholders are being decreased in value, there is no good or sound reason why they should not stop the shrinkage in values by liquidating.

To continue to operate in the face of certain losses in order to sustain local or sectional pride is simply making a few persons contribute money to uphold such local or sectional pride.

If by liquidating now Lyman stockholders would get $165 per share, and it was reasonably certain that by delaying liquidating two years from now the stockholders would only get $100 per share, the duty of the directors is very clear.

How many of those who criticise the liquidation of the Lyman Mills would be willing to contribute a sum of money in order to be able to say to the world that the Lyman Mills were still operating and yet that is just what some people are asking of the stockholders of that company.

It is no doubt true that the real trouble with most New England mills is antiquated machinery and antiquated management and that with large expenditures for new equipment the Lyman Mills could probably be operated on a small margin of profit, but the bankers of New England do not seem to favor expenditures for new equipment.

The situation of New England mills is deeply regretted and we find no pleasure in their misfortune.

We are discussing the Lyman situation as representative of the situation of many other New England mills purely as a business problem affecting a large section of the cotton manufacturing industry.

A Stable Market

In a newspaper story relative to the cotton manufacturing situation we note the following:

> Mill men, it was pointed out, are not so much concerned with the price of the staple as they are with the stability of the market. They want to see the farmer get a good price for his cotton though they would not like to see the price soar so high that cotton goods would again decrease in popularity.

We wonder how many hundreds or perhaps thousands of times we have heard mill men and commission men say that they were not much concerned with the price of cotton but wanted a stable market.

We wonder if a more foolish wish or statement could be made? The price of cotton is not stable and never will be and hoping for a stable price is about on a par hoping to strike oil in your back yard.

The price of cotton depends upon the supply of cotton and the demand for same and there will always be differences of opinion about both the supply on hand and the extent of the demand.

The supply of cotton depends upon the weather, which is always extremely fickle and uncertain, and scarcely is one crop harvested and ginned before ground is being prepared for another crop.

We know that a stable price of cotton is much to be desired but we also know that there never has been and never will be a stable price and the statement that there should be a stable price should be labeled No. 1 among foolish statements.

Steady Cotton Goods Business

Although the last of July is usually one of the dullest periods of the year in the cotton goods business, we notice the following in the weekly letter of a cotton goods commission house:

> Our sales this week have again been large and while the total yardage sold is not quite up to last week, they have run about fifty per cent in excess of full production and the orders booked are more representative of our entire line. This has been the most active colored goods week we have had for several weeks. Buyers seem to be a little more concerned about the price of cotton and are beginning to realize that prices generally are not on a basis of cotton; consequently, they are now placing orders ahead that they have held up for the last several weeks.
>
> Print cloths have been fairly active and prices have been advanced ⅛ cent a yard on practically all constructions. This new level of price is being maintained, and the goods have been well distributed among printers, the shade cloth trade, and the bandage cloth trade. Sheetings used by the bag trade have been quite active and there has also been a fair business from the converters on various constructions of sheetings, with a number of small orders on drills on a basis which is an advance of ¼ cent over a week ago. Mills making narrow drills are now in a comfortable sold up position.
>
> Our wide goods department has had its best week since the week ending June 2nd, and the orders are well distributed. There has been a fair inquiry for fabrics used by the automobile trade, with some good sales of sateens and broken twills at advances of ½ cent to 1 cent a yard; there has also been a good business on single filling ducks with trading rather quiet for the last few days, probably due to the advance in price of ½ cent a yard card base.

A Hot One

J. T. McAden, of Charlotte, sent us the following which he clipped from some newspaper:

A clothing manufacturer was sending his son of 12 to a boarding school. The father was discussing the subjects the boy had been studying, and questioned him on tables, studies, etc. The son turned to father and said, "I'll ask you one now? How many mills make a cent?" "Not a damn one," replied his father.

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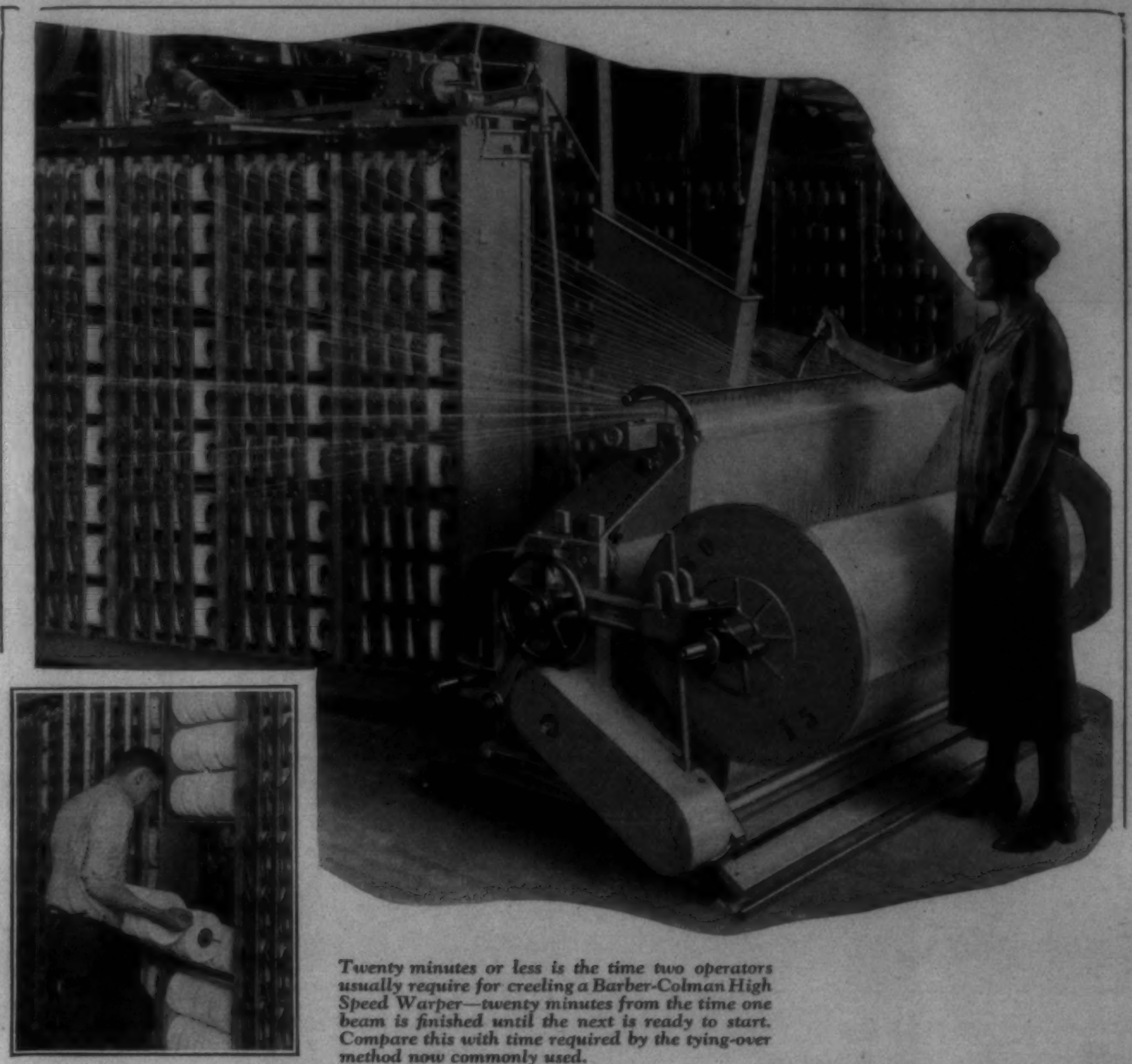

Twenty minutes or less is the time two operators usually require for creeling a Barber-Colman High Speed Warper—twenty minutes from the time one beam is finished until the next is ready to start. Compare this with time required by the tying-over method now commonly used.

THE true gauge of the worth of any machine is its ability *to produce*. Barber-Colman Automatic Spoolers and High Speed Warpers are proven producers. Save half the labor cost and half the floor space usually required for spooling and warping—and improve the quality of the warps.

We have a leaflet which will give you names of prominent mills using this improved yarn handling equipment

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Advantages of *LESTERSHIRE FIBRE SPOOLS

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LESTERSHIRE
FIBRE SPOOLS

eliminate all possibility of injury
to employes from rough
or slivered spools

***LESTERSHIRE**
FIBRE SPOOLS

Reduce direct labor costs.

Eliminate your spool replacement expense.

Eliminate loss of yarn due to spools (in many mills this loss runs into thousands of dollars).

Eliminate all possibility of injury to employes from rough or slivered spools.

Increase about 10% the yardage on your spools.

Eliminate warper kinks and knots due to spools.

Eliminate broken ends on your warpers due to spools and thus increase warper production 20% to 30%.

Materially improve the quality of your warps; and thus better the quality and increase your production generally.

OPERATIVES *will* stop spools with the palms of their hands. And rough, splintered spool heads will continue to inflict injuries which often incapacitate needed employes.

The operatives of mills equipped with Lestershire Fibre Spools are protected against the possibility of injury. That this protective feature of Lestershires pays dividends will be observed from this survey made in the mill† of a user:—

> "This feature also prevents cuts, bad splinters and infections in the hands of the spooler operators which were responsible for much loss of time, running to 50 or more days per year among this group. Naturally the operators prefer the new spools (Lestershire) which can be stopped by hand when travelling 1,140 r.p.m. without the former hazard."

Ask us to give you detailed information about the many advantages of Lestershire Spools.

Satisfaction Guaranteed

†Name on request.

LESTERSHIRE
TRADE FIBRE SPOOLS MARK
SPOOL & MFG. CO.

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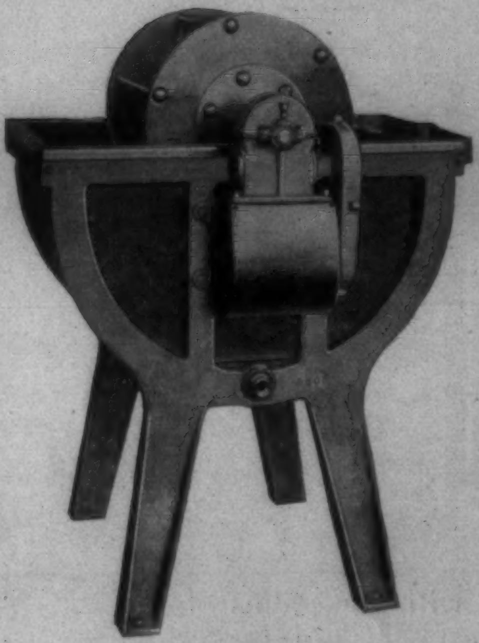
Johnson City, N. Y.

Southern Office:
519 Johnston Bldg.,
Charlotte, N. C.

These Paddle Wheel Types of Klauder Weldon Hosiery Dyers Are Monel Metal Throughout



10 pound machine
—drive end

Their Features

A balanced design incorporating proper proportions between paddle and tank to insure circulation and movement of the goods.

A most solid and substantial paddle wheel entirely free from rivets or rough surfaces likely to cause damage. It is smooth and will stay so.

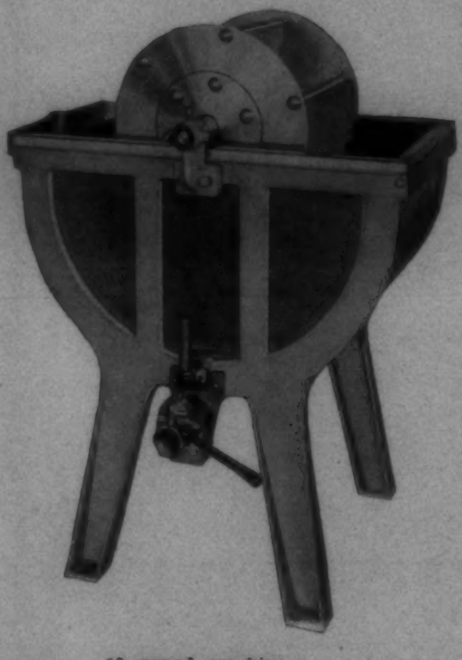
Equipped with overflow.

The drive is simple and compact, with few parts, insuring long life and freedom from repair expense.

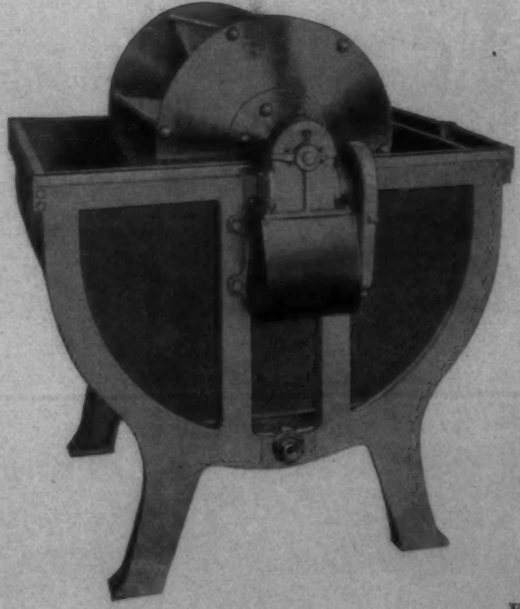
Tub and paddle wheel are of Monel construction, supported in cast iron frames, which also provide support and alignment for the drive.

Capacity—10 to 200 lbs. per dyeing.

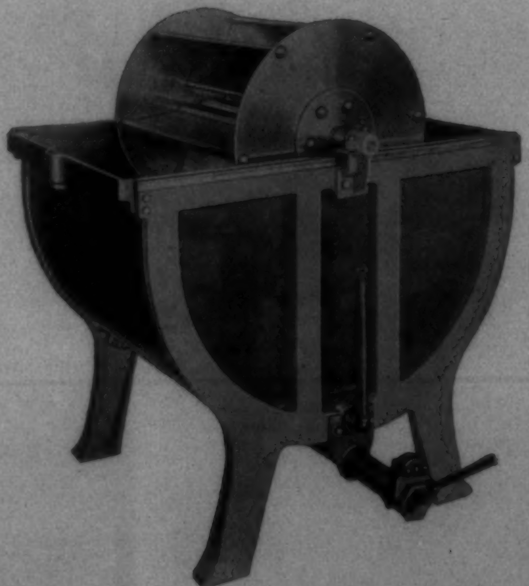
We shall be glad to send you a complete description of these paddle wheel machines. Also Klauder-Weldon Butterworth Rotary Hosiery Dyers.



10 pound machine—
liquor feed and drain
end—note overflow



25 pound dyer—
drive end



25 pound dyer—liquor feed and drain end, showing details of paddle wheel construction

KLAUDER-WELDON DYEING MACHINE DIVISION
H. W. BUTTERWORTH & SONS COMPANY
BETHAYRES, PA.
PLANTS AT PHILADELPHIA AND BETHAYRES
Philadelphia, Pa.; Providence, R. I., and Charlotte, N. C.
Canadian Representatives: W. J. Westaway Company, Hamilton, Ontario, Canada

BUTTERWORTH *Finishing* MACHINERY

Personal News

has accepted a position with the Greenville office of the Barber-Colman Company.

P. P. Curry has resigned as overseer of weaving at the Ninety-Six Cotton Mills, Ninety-Six, S. C.

T. V. Hughes, formerly of Tallassee, Ala., is now night overseer of weaving at McComb, Miss.

D. W. Hicks has been elected vice-president and secretary of the Irene Mills, Gaffney, S. C.

Paul C. Stevenson has accepted an important position with the Appleton Manufacturing Company, Anderson, S. C.

Virgil McDowell has been promoted to overseer of carding at the Eagle and Phenix Mills, Columbus, Ga.

W. M. Kirby, formerly with the Watts Mills, Laurens, S. C., has become overseer of twisting at the Judson Mills No. 1, Greenville, S. C.
Harold Herd, of Greenville, S. C.,

Yates D. Smith is overseer spinning and twisting machinery at the Loray plant of the Manville-Jenckes Company, Gastonia, N. C.

Harry C. Wheat has been elected president and treasurer of the Irene Mills, Gaffney, S. C., succeeding his father, the late H. D. Wheat.

E. H. Leftwich has resigned his position with the Union Bleachery, Greenville, S. C., to become overseer of dyeing at the Great Falls Manufacturing Company, Rockingham, N. C.

W. C. Vickers, formerly with the Ossippee plant of the Consolidated Textile Corporation, Burlington, N. C., is now shipping clerk at the Elmira Mills, of the same place.

W. R. Allen has resigned as master mechanic at the Pomona Mills, Greensboro, N. C., and accepted a similar position at the Elmira Mills, Burlington, N. C.

J. B. Webb has been promoted to second hand in spinning at the Georgia-Kincaid Mill No. 1, Griffin, Ga.

H. C. Morris has resigned as overseer of carding at the Smithfield Cotton Mills, Smithfield, N. C., and returned to his former position as overseer of carding at the Marlboro Mills, McColl, S. C.

J. B. Bell, formerly overseer of weaving and later manufacturing superintendent of the Pelzer Mill No. 4, Pelzer, S. C., has accepted the position of overseer of weaving at the Ninety-Six Cotton Mills, Ninety-Six, S. C.

Col. Leroy Springs, president of the Lancaster Cotton Mills, Lancaster, S. C., and S. B. Alexander, Southern representative of Crompton & Knowles Loom Works, will sail for Europe on August 5.

E. L. Atkins has resigned as overseer of carding at the Norris Mills, Catechee, S. C., and accepted a position with the Alice Mills, Easley, S. C.

B. B. Gossett, president of the Chadwick-Hoskins Company, Charlotte, and W. S. Lee, of the Southern Power Company, will sail for Europe on August 9.

John T. Bynum has resigned as overseer of spinning and winding at the Lawrenceville Mills, Lawrenceville, Ga., and accepted the position of overseer of spinning, spooling and warping at the Appleton Manufacturing Company, Anderson, S. C.

W. H. Beckerdite, of Winston-Salem, N. C., has accepted a position with the Cannon Manufacturing Company, Kannapolis, N. C., where he will be in charge of all insurance matters for the mill.

William H. Harris has become associated with Andrew McLean Company, of 12 East Twenty-second street, New York, and will open a department for the production of upholstery, drapery and specialty fabrics and has been, up to recently, with the Amoskeag Manufacturing Company.

Andrew McLean Company has its own mill, at Passaic, N. J., which is listed as making shade cloth, napped goods, nettings, etc., with an equipment of 246 broad and 20 narrow looms. In the development of his specialty fabric department for the company, Mr. Harriss expects to use some of its own cloth, and to buy other fabrics in the open market.

Conference on Human Human Relations in Industry

The annual Southern Conference on Human Relations in Industry will be held at Blue Ridge, N. C., August 5 to 7. The textile industry will be well represented on the program and in the personnel of those attending.

The conference program includes meetings representing various industries. F. Gordon Cobb, vice-president and general manager of the Lancaster Cotton Mills, Lancaster, S. C., will be the principal speaker before the textile group. His subject will be "Developing Personality in Industrial Communities."

A number of very important speakers will address the meeting and there will be group discussions dealing with the general theme of human relations in industry.

The promotion committee for the conferences includes the following well known textile men: A. H. Bahnson, Winston-Salem; C. A. Cannon, Kannapolis; L. W. Clark, Spray, and B. E. Geer, Greenville.

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Bobbins For Filling Wind
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Newburger Cotton Company, the oldest cotton merchants in America, has bought classed, sold and thought cotton for over thirty-four years. Literally speaking, we have been "aged in cotton." Naturally, our service reflects the fruits of long experience.

Capital $1,000,000.00

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MILL NEWS ITEMS OF INTEREST

Kannapolis, N. C. — The Cannon and Cabarrus Mills are closed this week to give the operatives their usual annual vacation.

Birmingham, Ala.—An increase in capital stock has been certified to by the Stroud-Holcombe Cotton Mill, Inc., from $250,000 to $350,000.

Rome, Ga.—Construction work on the Rome Hosiery Mills No. 2 has been started and will be rushed to completion. The plant will make mens' womens and childrens hosiery.

Gaffney, S. C.—Harry C. Wheat was elected president and treasurer of the Irene Mills to fill the vacancy caused by the death of his father, Hiram D. Wheat. D. W. Hicks was elected vice-president and secretary.

Concord, N. C.—The contract for the construction of an addition to the Kerr Bleaching & Finishing Co., of this place, according to announcement from J. E. Sirrine & Co. The addition is to be 175 by 40 feet in dimension and one-story high. Work will begin as soon as the needed materials can be assembled.

Kinston, N. C.—The Kinston property of the Kinston Knitting Co., was sold at receivers sale to C. Felix Harvey. He bid $300 for the property, which is subject to a lien under a deed of trust to the Virginia Trustee Co., trust and $6,346 for the property on which there is no lien. Mr. Harvey's entire bid for the plant here and at Beaufort, which he also bid on, amounts to about $95,000 including the liens.

Mt. Holly, N. C.—The office of the American Yarn and Processing Company has been moved from the building occupied by them since 1912 to the newly remodeled office building formerly occupied by the Central Bank, Louis Kaplan store, and hotel lobby on Main street.

The new office is most conveniently located in the center of the business district and is one of the largest and best equipped of any in this section of the country.

Large private offices are occupied by C. E. Hutchinson, Edwin Hutchison and Arthur Dixon. Back of the private offices is the cotton department under the management of E. H. Venning.

Troy, N. C.—The Rhyne-Anderson Mills, which were recently placed in bankruptcy, were sold under court decree at the court house at Troy at noon on July 26th. They were purchased for $45,000 by E. O. Anderson, of Charlotte, N. C. The Rhyne-Anderson Mills have 5,000 spindles on 20-2 yarns, and for the past two years have been under the management of Milton Ensor. There is little probability of the mills being put in operation at any early date.

Monroe, Ga. — It is understood that the improvements planned at the Monroe Cotton Mills this year will cost about $30,000. Chas. M. Miller is president.

Chattanooga, Tenn. — The Dixie Mercerizing Company, has let contract to the Mark K. Wilson Co., of this city, for construction of the addition to its single yarn mercerizing plant.

Forest City, N. C.—News that the Florence Mills Company of South Carolina has purchased a large tract of land near Bostic, near Forest City, has given rise to much speculation as to for what purpose the land was purchased. Mill officials are silent as to their plans.

Opp, Ala.—The new looms to be installed in the addition to the Opp Cotton Mills have been purchased from the Stafford Co., and the opening, drawing, picking roving and slashing equipment from the Saco-Lowell Shops. The new machinery will double the output of the plant.

Spartanburg, S. C.—Contract for the lighting of the $750,000 addition to Mills Mill No. 2 Woodruff has been let by Lockwood, Greene & Co., to the Walker Electric & Pumping Co., of Atlanta, Ga. The work will cost $30,000.

A contract has also been let for a 75,000-gallon water tank to R. C. Cole, of Newnan, Ga.

Johnson City, Tenn.—Two important announcements of interest to the textile trade have just been made here.

Max Korff, vice-president and general manager of the American Bemberg Corp., who returned from New York on July 16, states:

"After weeks of study and discussion of all phases and features in connection with the next unit of the American Bemberg plant, I am glad to announce that, after conferring with our engineers, Lockwood, Greene & Co., we are ready to start the work. We have submitted to various bidders the plans for excavation, which is the first step toward the construction of the new unit. We expect to be in position to close the contract for the work in a short time and the contractors will be ready to start the work not later than August first."

The unit referred to will be erected adjoining the present unit of the American-Bemberg plant in Happy Valley between Johnson City and Elizabethton. It will manufacture "Bemberg Yarn" and will require about 2,000 operatives, when completed.

The other important announcement was made by Beveridge C. Dunlop, vice-president of the American Glanzstoff Corp., who spent several days here during the past week. He stated that construction of the first unit of the Glanzstoff corporation, (manufacturers of rayon) was expected to begin in September. This plant, too, is in charge of Lockwood, Greene & Co., as engineers. The location will be near the Bemberg site and about 4,000 operatives per unit will be required.

Cannons File Tax Suit

Raleigh, N. C.—Suit was begun in federal district court for the recovery of $628,108.01 paid in income taxes on the J. W. Cannon estate of Concord five years ago.

The complaint filed in the action alleges that the tax, paid under protest on August 10, 1922, was levied against funds handled by the Cannon Mills which the government charged up as a part of the income of J. W. Cannon for the year 1919 but which in reality were distributed among individual members of the Cannon family and constituted no part of the income of Cannon himself.

The plaintiffs composed of Commissioner Blair and Charles A. Cannon as executors of the Cannon estate, and Blair, Charles A. Cannon and the Wachovia Bank and Trust Company, as trustees under the will, are represented in the proceedings by a notable array of counsel, which includes Charles Evans Hughes, New York law firm of Hughes, Rounds, Schurman and Dwight, the Charlotte law firm of Cansler and Cansler and the Raleigh firm of Pou and Pou.

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COMMISSION MERCHANTS
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COMMISSION MERCHANTS
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Complete Topographic Surveys
General Designs, Grading, Planting and Detail Plans
Supervision of Landscape and Engineering Construction
Largest Landscape Organization in the South

United States District Attorney Irwin B. Tucker will represent the federal income tax collector for North Carolina, Mr. Grissom, when the case comes to trial. He may have assistance from Washington.

The allegation in the complaint involves a complicated series of financial transactions among the various interests of the late J. W. Cannon which gave rise to the conditions that have brought on the suit.

The income tax was collected against commissions paid to the Cannon Mills for the sale of products of the Cannon Manufacturing Company, and the Cabarrus Cotton Mills. Up until 1917, it was set forth J. W. Cannon himself owned practically all of the co-partnership of the Cannon Mills selling agency, but in that year, the plaintiffs contend, he divided his interest in the agency among 10 members of his immediate family under an agreement by which eight of the 10 were to receive one-twelfth of all commissions coming into the hands of the Cannon Mills and the other two were to receive two-twelfths.

Had Distributed Funds.

The funds against which the government levied the income tax of $628,108.01 were paid over to the Cannon mills and by that agency distributed according to the terms of the agreement among the 10 members of the Cannon family. That was for the year 1919 and the individual participants each paid income tax on their respective shares. J. W. Cannon died in December, 1921.

In 1922, according to the complaint, the federal government came along and charged the 1919 funds up against the Cannon estate as a part of the income of J. W. Cannon himself. The amount of the tax being the amount in controversy in the instant action.

The tax was paid August 10, 1922, under written protest, and the complaint alleges, under "compulsion, duress and coercion." Soon thereafter an appeal for a refund was made to the United States commissioner of revenue, who is Mr. Blair himself, but no action has ever been taken on it. Which gives the plaintiffs their chance to get into federal court.

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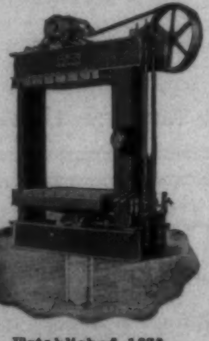

Fine Athletic Field Paid For in Original Manner

By Mrs. Ethel Thomas.

Ranlo, N. C., suburb of Gastonia, has one of the finest athletic fields in the State, just recently completed and paid for in a very original manner. It is well fenced, has a fine grand stand that does not face the afternoon sun, grounds as smooth as grading can make them, all costing $3,000 and not one cent contributed by the mill company or any individual. It is the most wonderful demonstration of co-operation that we have seen in that line.

Four Live Wire Superintendents.

John A. McFalls, superintendent of the Ranlo Manufacturing Company, J. F. Armstrong, superintendent Rex Spinning Company, Wilson McArver, superintendent Priscilla Spinning Company, and J. A. Graham, superintendent of Spencer Mountain Mills, their co-workers, and H. T. Godwin, secretary of Rex Spinning Company, actually sold display advertising to local merchants to pay the entire $3,000 output.

The fence space was sold at $30 for a six by ten feet poster, and the gorgeous coloring of those posters attract attention from all who pass. That fence is a beauty.

Space back of the grand stand sold for $75 and there is $45 worth of advertising on the score board. There is still some space left, and advertisers are realizing its value.

Love Athletic Field.

This beautiful playground has been named Love Athletic Field, in honor of W. T. Love, who is either president, treasurer or other official in the above mentioned mills, and is highly esteemed by all in his employ.

Cotton Spinners and Planters to Meet

Columbia, S. C.—For the first time in history representatives of the cotton spinners and the cotton growers will meet for the purpose of discussing mutual problems according to announcement made by the South Carolina Cotton Growers' Cooperative Association. This conference will be held during the month of August and the cotton spinners as announced by Walker D. Hines, president of the Cotton Textile Institute, will be represented by Robt. Amory, vice-president Nashua Manufacturing Company, Nashua, N. H., also former president of the National Association of Cotton Manufacturers; George S. Harris, president of Exposition Cotton Mills, Atlanta, Ga., president of the Cotton Manufacturers Association of Georgia; J. C. Evins, president South Carolina Cotton Manufacturers Association; E. C. Dwelle, vice-president, Chadwick-Hoskins Company, Charlotte; John M. Holt, treasurer, Luther Manufacturing Company, Fall River, Mass.; W. S. Pepperel, National Association of Cotton Manufacturers.

The Personnel.

The cotton growers, according to C. O. Moser, are represented by the following: J. T. Orr, president, Texas Farm Bureau Cotton Association; U. D. Blalock, general manager, North Carolina Cotton Growers' Co-operative Association; J. B. Conwell, president, Georgia Cotton Growers' Co-operative Association; G. G. Henry, president, Arkansas Cotton Growers' Co-operative Association; S. L. Morley, general manager, Oklahoma Cotton Growers' Association; C. O. Moser, president-general manager, American Cotton Growers' Exchange.

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The Standard Textile Belting
USED throughout the Industry
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It is waterproof
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Southern Agent: Cameron McRae, Concord, N. C.

W. C. GIBSON, Atlanta, Ga.
Georgia and Alabama Representative.

JACK WILKINS, Greenville, S. C.,
South Carolina Representative

Boil-off Oil

Soluble Oils
50%-75%

Rayon Sizings

Visiting Europe

(Continued from Page 19)

discover when we were in the gondola tha the had nothing to do with the gondola and that he had to be paid for conducting us to it.

I had heard much about the canals of Venice but nobody had once mentioned their smell. On the grand canal which has boats similar to street cars plying up and down and on the ocean front they are not so bad but the narrow passages which we traversed on the way to the hotel were close kin to American sewers. At several places I noticed slimy wharf rats on the steps of doors.

We reached the Royal Danelli Hotel about 5 o'clock and with the exception of not having any elevators found it first class and they gave us excellent treatment.

A short distance from the Royal Danelli Hotel, about the only land in Venice, the famous St. Mark's Square on which is located the historic St. Mark's Cathedral and the shopping section of Venice, and by 5:30 we were watching the feeding of the thousands of pigeons which for many generations have been a feature of St. Mark's Square.

Leading from the square is a net work of streets, not more than ten feet wide, along which are shops and stores.

I accompanied Mrs. Clark and the other two ladies of our party down one of these streets and in a small shop Mrs. Clark decided to buy a pocket book for 40 lira (a lira is 5.65 cents) and I handed her a 100 lira note which she in turn handed to the merchant.

They gave her only 10 lira change and insisted that she had given them a 50 lira note and all three clerks pretended that they could not understand English.

I had been robbed so much that day that I had reached the limit and in very emphatic if not choice language announced that if Mrs. Clark did not get the 50 lira due her I was going to clean out that joint.

When they saw that I meant business they suddenly discovered that they could talk English, returned the 50 lira and apologized for the error.

Later Mrs. Clark, when I was not with her, had a similar experience in another shop, but refused to leave until she got her money and it was returned.

We had intended to go to Florence and possibly to Rome, but decided that night that we would get out of Italy as early as possible, and that until the Italians quit trying to rob the tourists we would advise all Americans to go elsewhere.

(To be Continued)

Mills and Distributors To Co-operate

The inauguration of a definite movement among manufacturing and distributing interests in cotton textiles to promote a better understanding of common problems took place Tuesday at a preliminary meeting of representatives of the various branches of the industry in the offices of the Cotton-Textile Institute in New York, according to an announcement of Walker D. Hines, president of the Institute. Following a general discussion it was decided that a formal conference should be held September 27. Mr. Hines presided at the meeting

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Our Automatic Shuttles are giving Perfect Satisfaction in Leading Mills throughout the country on all classes of work.

and Geroge A. Sloan, secretary of the Institute, acted as secretary.

The decision to hold a meeting next September was put in the form of a resolution and adopted as follows:

"That a formal conference be held at the offices of the Cotton-Textile Institute on Tuesday, September 27, 1927, to which the interests represented at the preliminary meeting be invited to send three representatives each and that each organization send to the Institute, at least ten days in advance of the conference, a list of topics for discussion relating to the general subject of distribution."

It was the consensus of opinion at the meeting that such conference were calculated to be extremely useful in giving the members of each of the organizations in question a better knowledge of the members of the other organization, and in leading to a correction of any methods found not justified by essential conditions, thus benefiting the public as well as the interests represented at the meeting.

Manufacturers were represented through the Cotton-Textile Institute, Inc., by Walker D. Hines and Gerrish H. Milliken. Andrew Raeburn, secretary of the Fine Cotton Goods Exchange of New Bedford, was also present by invitation.

Commission merchants were represented through the Association of Cotton Textile Merchants of New York by Bertram H. Borden, S. F. Dribben and Perry S. Newell, secretary.

Converters were represented through the Converters' Association by M. J. Warner, president.

Finishers were represented through the National Association of Finishers of Cotton Fabrics by H. B. Thompson, of the association's executive committee.

Wholesalers were represented through the National Wholesale Dry Goods Association and the Southern Wholesale Dry Goods Association by W. M. G. Howse, president; S. M. Bond, Ernest Stix and J. W. Scott, for the National Association, and Clarence G. King and Murray Brown, for the Southern Association.

Retailers were represented through the National Retail Dry Goods Association by Lew Hahn, managing director.

Sue for Commission on Judson Sale

New York.—An attachment for $25,160 against the property of Bennette E. Geer, of Greenville, S. C., president of the Judson Mills, was filed in the Supreme Court in a suit of W. O. Gay & Co., brokers, of 27 William street, for commissions alleged to be due on the sale of the stock of the Judson Mills to Deering, Milliken & Co. The brokers also sue Mr. Geer, as a trustee of the Duke Endowment, and other officers of the Duke Endowment, as well as officers of the Duke Power Company and Southern Power Company, holders of large blocks of stock in the Judson Mills, claiming a total of $185,000 commission. They asked an attachment only against Mr. Geer's property here, on the ground of his non-residence, stating that they are not yet advised as to the exact amount of commissions due from other holders of Judson stock because of the recent sale.

The affidavit of William O. Gay, applying for the attachment, said that Mr. Geer, as president and treasurer of the Judson Mills, made a contract with the plaintiff which is partly oral and partly written, and that in the spring of 1926, Mr. Geer submitted to him a proposal to find a purchaser for the Judson Mills or its common stóck, agreeing to pay 5 per cent commission on the purchase price. Mr. Gay said he interested Garrish H. Milliken, of Deering, Milliken & Co., and advised Mr. Geer on May 21, 1926, that Mr. Milliken was a prospective purchaser.

Mr. Gay said that the negotiations continued looking to the sale of the stock and that thereafter Mr. Milliken proposed purchasing only stock control ,but that Mr. Geer was not satisfied because he said he had put some of his friends into the mill stock, and any offer must also include the minority shares. Mr. Gay said he then told Mr. Geer that he would look to him for a commission on the sale not only of control, but of the minority stock.

The affidavit says that on May 5, last, Mr. Geer said he owned 3,500 shares of common stock, that the Duke estate had 9,200 shares and the Southern Power Company 400 shares, making a total of more than 13,000 out of a total stock issue of 25,000 shares. Mr. Gay has since learned that the Duke stock was held by the Duke Endowment, of which Mr. Geer was one of the trustees. Mr. Gay said he was informed on July 7 that Mr. Milliken had purchased the stock from Mr. Geer and his associates at $148 a share, whereupon Gay telegraphed Geer he would expect a cash commission on the sale.

"I met Mr. Geer by appointment at New York on July 13," said Mr. Gay, "and he stated at that meeting that he recognized that my firm had brought about this transaction and was entitled to commission, but he refused to pay me anything."

Mr. Gay said he then started suit and served the papers on Mr. Geer at the Hotel Belmont on July 13. He said that on the sale of the 25,000 shares at $148, the purchase price would be $3,700,000 and the commission would amount to $185,000, but is asking only 5 per cent of $503,200, alleged to have been received by Mr Geer for his stock, because the offer to the other stockholders is open until August 1, and the plaintiffs do not know how many of the minority stockholders will take advantage of the offer and no attachment is asked for against the Duke Endowment because the plaintiff does not know how much stock the endowment will sell, but on the basis of 9,500 shares held by the Duke interests, the amount would be at least $70.300.

Greenville, S. C.—Ground was broken Monday for the Slater Mill at Marietta. Excavation will continue for some time and actual construction work will likely begin early in August. The project represents an outlay of about $275,000 exclusive of machinery.

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In this department we are developing not only the practice but the theory of the Washburn Wood Top Roll as used in modern cotton spinning.

From time to time we will publish in this space Bulletins of Results compiled from actual tests. For this purpose we will use roving produced under actual mill conditions and taken at random from the regular run.

This work is in the hands of experts and their services are at the disposal of any mill or mill official desirous of investigating the merits of the Washburn Wood Top Roll for Regular or Long Draft Spinning.

Hundreds of Successful Mills are Cutting Costs with This Modern Spinning Roll.

WASHBURN

IF IT'S ROLLS, WE MAKE THEM

224-234 N. Water St., New Bedford, Mass.

The Fine Points of Carding

(Continued from Page 20)

teeth are sharp. The doffer should always be ground lighter than the cylinder as it hasn't the amount of work to do that the cylinder has. Flats should be ground every sixty days. As any flats that have become dull will not do good work.

Now after a card has been ground sufficiently and assuming that everything is in first class condition we believe the following settings will give good results. Feed plate to licker-in .010; mote knives to licker-in .007; licker-in to cylinder .007; flats to cylinder .010; doffer to cylinder .007; cylinder screen to cylinder .017; at the back, .029 at the bottom and ⅛-inch in front. Back plate should be set to .017 and front plate to .022; doffer comb to doffer .017; stripper comb to flats .017.

H. & B.

Number Forty-eight

I will try to jot down a few notes on the Fine Points of Carding, which I have learned through years of experience together with the studying of a course in the I. C. S. on complete cotton manufacturing.

First, the card should and must be set up level and have good clothing put on it very tight. All moving parts must be kept well oiled and card clean. Do not let the fly under licker-in accumulate until it is up to the screen, as the fly is allowed to accumulate in the mote box until it reaches the screen the motes and trash will not fall through the screen and thus go on through the card with the cotton.

The cards should be stripped out often enough to insure clean carding at all time. Grind your cards often enough to prevent the wire from becoming dull. They should be ground at regular intervals, from 14 to 21 working days, depending upon the class and the amount of cotton being carded.

Settings.

The feed plate should be set from 10 to 12 one thousandths of an inch from the licker-in. The feed roll should have sufficient weight on it to hold the cotton so it will not be jerked through in wads, mote knives to licker-in, bottom .010, top .012. Too close setting here will cause broken fibers; screen under licker-in about .010; licker-in to cylinder .007; back knife plate .029; flats to cylinder .010 or .007; if card is on a good steady floor, screen to cylinder, licker-in end .029, bottom ⅛-inch; doffer end ⅛-inch (or there about) doffer to cylinder .007; front knife plates top .029, bottom .034; doffer comb to doffer .029, or as far off as it will take the cotton off of the doffer, the farther off it will run the less trash it will knock or fan out of the doffer into the sliver; stripper comb to the flats .022. The spiral brush should be set close enough to keep the flats brushed out clean. The little brushes that are to keep the ends of the flats clean should be kept in good working condition, because if dirt and oil is allowed to accumulate on the ends of the flats it will hold them up off of the arch thus causing the wire on the flats and that on the cylinder to be too far from each other which will result in poor carding.

Speed.

The card cylinder should run at from 165 to 175 r.p.m. The doffer should run from 8 to 12 r.p.m. The card should not be forced to put through too much cotton. I think that the best results are obtained at from 90 to 100 pounds per day of 10 hours with a doffer speed of about 8 or 9 r.p.m. (for quality carding).

Cards should always be placed on the bottom floor, and all belts kept tight and well lubricated with some good belt dressing.

The trumpets at the coiler head should be of the proper size for the weight sliver you are making. Too large a trumpet will cause uneven sliver.

B. M. T.

Amory Sees Better Outlook

THERE is a good future for the New England cotton manufacturing industry, in the opinion of Robert Amory, assistant treasurer of Nashua Manufacturing Company, and one of the best informed of New England textile executives, says the Boston News Bureau. The mills are in good condition, he says, and their personnel is prepared to wage a stiff fight to regain a measure of former prosperity, but before they will succeed, in Mr. Amory's opinion, they must receive the benefits of more advantageous working conditions.

"'Sweet are the uses of adversity,'" declared Mr. Amory to a Boston News Bureau representative. "New England has been through a bitter experience in the past five years, but in the end this will prove of benefit. Many mill managers were lying back on their oars after years of easily won prosperity, and labor was growing too arrogant.

"Now all this has changed. Mill management is working as never before. It is checking up closely on buying, operating and merchandising. Many economies have been effected, particularly in production. More goods are being turned out per man. Automatic machinery and new devices have been installed to cut down operating costs.

"And I am glad to say that in a great many mills the operatives are catching the spirit admirably, are running more looms, trying to cut down waste, etc., in their realization that the problem is common to the owner and themselves.

"I am not much concerned over the fine goods end of New England

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EMMONS LOOM HARNESS AND REEDS

cotton mills because our mills look to manufacture of plain goods for a very large part of their revenue. Every fine goods enterprise must run on some plainer constructions between times of putting through fancies. Discard looms turning out plain cloths—sheetings, lawns, other combed yarn fabrics, etc.—and you would scrap the major portion of the New England textile industry. Therefore we cannot depend entirely on styling.

In Better Shape Locally.

"Our local industry is in much better shape than it was a year ago. Last year it was the exceptional mill which made a profit. This year the rank and the file will operate in black ink, and many mills will show very satisfactory earnings, at least as compared with recent years."

"But there is still overproduction. It is mainly a buyer's market. Goods prices have not followed up the advance in the staple because many units are willing to work up their cheaply bought cotton into cloth to be sold for an inadequate return.

"In my opinion this situation is due to too much night running in the South. In the first half of this year we put through a tremendous yardage of cotton cloth, an indication of the inherent soundness of the industry. Our mills as a whole were running overtime, in June at 109.2 per cent of single shift capacity. Why the extra 9 per cent? Actually New England ran at about 60 per cent of full capacity and the South 140 per cent. The major trouble is in that night operation, and I know from personal experience that many Southern mill men are just as opposed to the practice as we in New England. But correction will come only with unanimity of Southern sentiment.

Equalization with the South.

"It is well known that New England's greatest need is equalization with the South in matters of taxes working hours and wages. There is the heart of the problem. Fortunately we are not without some hopeful signs. In taxes particularly, there seems to be a much more co-operative spirit toward the mills. In many cases taxes have been rebated and assessments reduced as textile communities have awakened to the necessity of working hard to retain their important industries. At Nashua our company was granted a reduction of $1,400,000 in assessed plant valuation and we confidently hope for more. All mills will stand much more of this sort of co-operation.

"As to wages, the North must come down or the South must go up. There is already some trend in this direction. In due time, increased competition for labor as industrialization of the South progresses will tend to narrow the spread. So important is the matter of the payroll that if New England mill labor had accepted in good spirit the 1922 effort to reduce textile wages 20 per cent—the same sort of post-war readjustment which took place in any number of industries—our mills would be today in wonderful shape.

"The matters of hours is of course a difficult one because politics will always be involved. Witness the annual failure at the State House to enact measures favorable to Massachusetts mills. But in the last analysis the workers must realize that if their jobs are to survive they must do an honest day's work, must work longer manufacturing. We will, I believe, always retain our supremacy there. But and more regularly without minor interruptions and petty strikes over trivial complaints.

More Sympathetic Public Sentiment

"Then there must be a more sympathetic attitude of the public toward the mills, the same spirit which is being reflected in lower taxes in some municipalities. Too many New England cities and towns look upon their mills merely as a source of revenue, in taxes or wages. In the South and West an industry is an object of local pride. There a hard fight had been made to secure the enterprise and an equally hard fight will be made to retain it.

"With the handicaps under which New England mills have been forced to operate it was inevitable that some units would go under. Hence the present wave of liquidation. Where the management has not kept production to the make of goods it could sell, where labor has been too arbitrary, and where the burden of taxes has been too heavy, some mills have had no other course but dissolution. I think the liquidation movement may spread too far, however, and I believe every soundly conducted enterprise, if given a fair chance, will come through."

Herman A. Metz Textile Prizes Awarded

When the youth of ancient Greece met in competition the victors were determined by superiority of muscular speed and strength. It is typical of our civilization perhaps that contests awards are also made to the youth of both sexes for mental agility.

These contests are made possible by the generosity of public spirited citizens. One of annual interest to the textile industry especially is inspired by Hon. Herman A. Metz.

Each year the students of the Textile High School compete for prizes donated by Col. Metz for proficiency in batik and dyeing, and chemistry and dyeing. The wards for 1927 have been announced as follows: batik and dyeing, first prize, Anna Hudak, second prizes, Lena Saslowsky and Katherine Muller; chemistry and dyeing, first prize, Harry Dwoskin, second prize, Albin Bschorr.

The future of the Textile High school seems splendidly assured through the recent action of the Board of Education, in response to agitation by Col. Metz. This institution acts as a feeder for the ranks of textile workers. At present it is scattered in five buildings throughout New York City. The recent resolution of the board will result in housing all the activities of the Textile High school in one modern building to be located on the upper West Side.

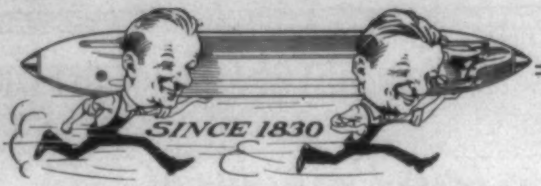

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FIG.20.
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Pomona, N. C.
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Reverse Plating

(Continued from Page 14)

plating and "floating" for the production of fancy seamless hose and half-hose. When plating and "floating" the fabric is not of uniform thickness throughout, but is thinner when the normal thread is "floated." At first only vertical stripes could be made by reverse plating as on Cotton's patent frames, but machines are now available for producing diamond and similar designs by diagonal striping, and might readily be adapted to produce any design within a given area on an ordinary pattern-wheel principle. Furthermore, there is every likelihood of a machine with jacquard control of the design sinkers reaching this country shortly. Sinkers shown at E, F and G are those that have been used for vertical striping, E is the ordinary holding-down sinker or web holder, F the design sinker proper and G a supplementary design sinker whose function is to facilitate the re-reversing of the threads. The chief difficulty experienced in sinker plating on plain automatic-knitting machines has been, and to some extent still is, to get the threads once they are reversed to regain their normal relative positions. On the latter type of reverse-plating machine, where the reversing of the threads may take place in different positions at successive courses no special sinker with the function of G can be used, but the difficuty is largely overcome by suitable adjustment of thread tensions.

For diagonal-stripe effects two sinkers ride in each trick of the sinker ring, an ordinary sinker H used solely as a web-holder and a design sinker J controlled by means of jacks placed in two selecting wheels, one of which has one more trick than the sinker ring, while the other has one less. A 160x3¾ machine has one selecting wheel with 161 and the other with 159 tricks, and both work simultaneously at one and the same feeder. Jacks are set out in these whees in a predetermined order. When a jack engages with a sinker the latter is pushed inwards into position to reverse the threads. As one wheel gains a trick and the second loses a trick at each revolution of the sinker ring, one wheel produces diagonal stripes one way and the second diagonal stripes the opposite way, but, in the resultant fabric, the stripes are not continuous, as only when a design sinker meets an empty trick in both selecting wheels does it remain out of action.

Additional mechanism is attached to these sinker-selecting machines, which makes it possible to change from diagonal-stripe pattern to vertical-stripe pattern, and means are also provided for making a plain foot bottom if this is desired.

A feature of reverse plating is that, like plating and "floating," as distinct from knitting and "floating," it allows fancy designs to be made by means of a single feeder so that there is no second feeder to "cut out" when making heels and toes.

Latch needle circular-web machines are broadly classified under two headings, viz:—

(1) Revolving needle cylinder machines.

(2) Stationary needle cylinder machines.

Satisfactory means have now been found whereby reverse-plated effects can be made on either class of machine. The mechanism employed on revolving-cylinder machines is materially the same as that mentioned above for making fancy seamless hose or half-hose, two selecting wheels being used at each feeder.

Reverse plating by similar means on stationary cylinder machines, though not impossible, would necessitate a somewhat more cumbersome mechanical arrangement, as the selecting wheels, besides revolving on their own axes, would have to revolve with the cam cylinder.

The attachment actually fitted to one build of stationary cylinder machine embraces selecting devices of a stationary character, though they may be given an intermittent movement to build up a design. The threads are reversed through the agency of the yarn guides, which are controlled from two annular rings concentric to the needle cylinder. The two rings are cut each with the same number of tricks as there are needles in the cylinder. Each ring is under the independent control of two pattern chains, which decide whether it shall remain stationary or shall move onee needle distance, clockwise or anti-clockwise, after each course. A full trick in either of the selecting rings causes the yarn guide to reverse, so that the needle in corresponding position forms a loop which shows the thread that is normally hidden.

Though, as far as the writer knows, this attachment has not yet been used to give the ordinary reverse-plated design, it could be readily adapted to do so. Its present use is to produce a fancy tuck fabric in which the plain ground appears in one color only, while the tuck patterns, diamond, zig-zags, etc., in 1 by 1 cross tuck, and such like, show a predominance of the other color.—Textile Recorder, Manchaster, Eng.

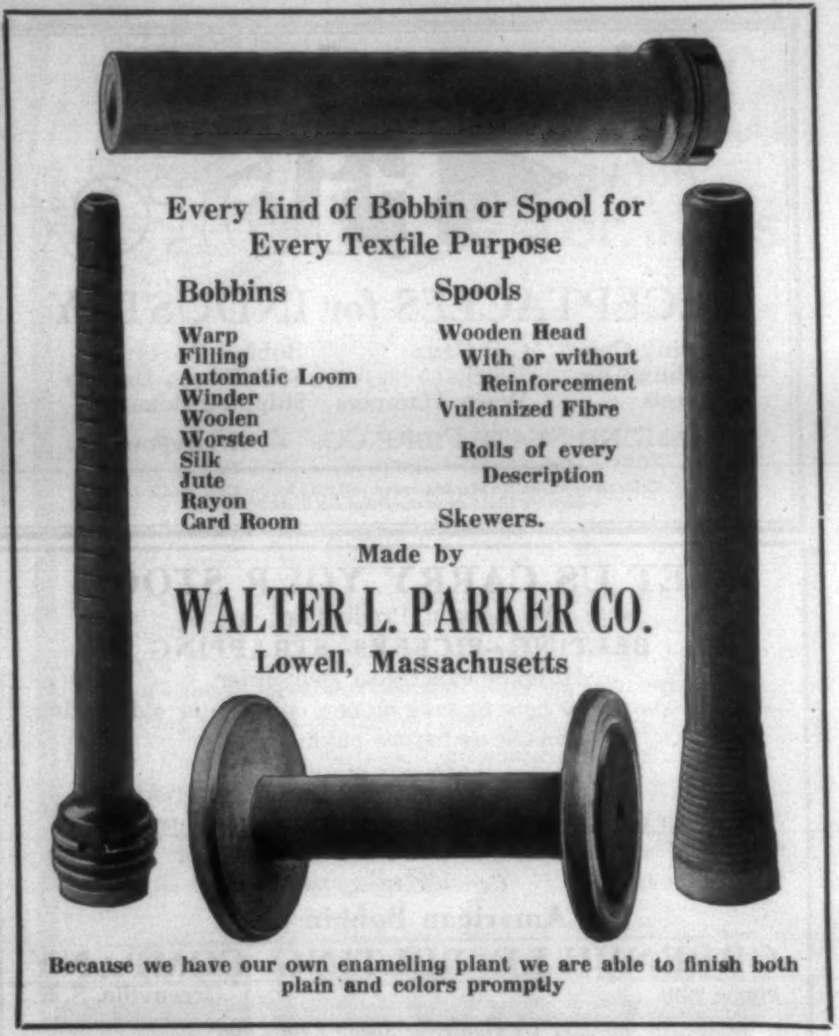
Sipp Machine Co. Gives Stock to Employees

The Sipp Machine Co., of Paterson, N. J., who for over thirty years have been manufacturers of silk machinery, and within the last few years rayon machinery, tendered a dinner to all of the employees at which time the company presented each employee with one share of 7 per cent preferred stock at $100.00 par, for each five years of continuous service.

Many of the employees have been with the concern for over twenty-five years and received five shares of stock.

This stock was given absolutely gratis to the employees and it is the intention to continue this plan indefinitely.

The Sipp Machine Co. has always manufactured only textile machinery of high quality and feel that in following out the above plan, that they are more apt to retain the older and experienced employees than attempting to use inexperienced help.



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Yarn Defects and Their Causes

(Continued from Page 8)

the manufacturer to buy the best super yarn. Slubs and soft ends are caused by dirty rollers, traverse guides, roller beams, copping or ring rails, etc.

Dirt and short fibres accumulate until they are caught up and taken on the ring bobbin. Slub and snarl catchers are very useful, but prevention is better than cure. If proper care is taken these troubles should be practically eliminated.

Faulty creeling is a great evil. Thick piecings in the creel are either drawn out into long thick ends or pass through the rollers as slubs, and late piecings, when double roving is used, cause thin and weak places. Careless oiling of spindles and rollers causes oily ends and consequently stains. Bad setting of rollers and faulty drafting make uneven yarn, and I should like to say a little on the high drafting we hear so much about. It is quite possible to make a good yarn by this system when spinning down to 16's out of a mixing good enough for 40's, but you want very low drafts when spinning up. For instance, try to spin 26's with 14 of a draft out of a mixing just good enough for 12's and you will get a most uneven yarn in comparison with, say 5 of a draft.

"Shiners" and Loops In Rayon Filling

(Continued from Page 8)

sixth harnesses of a 12-harness cotton warp; and there was less take-up or interlacing of these ends than other ends in the figure. Therefore, these ends would be looser and produce more sag. So, of course, we hiked back to those looms at fault fo ra thorough looking over. We found by looking at the shed that when the lay was in position for the shuttle to pass through, that quite a few of the ends from the fifth and sixth harnesses were caught together at a distance of ½ to 1½ inches from the fill of the cloth, one of the harnesses up and the other down, the projecting fibres of each thread holding them together so that when the shuttle passed through it would not always separate them. The filling would be held from being pushed forward by the reed. As these two ends were drawn into the same dent, the reed would pass over and draw the filling into a loop.

In some cases, where the harnesses were timed early, this would also make a "shiner" one side of the loop. By raising the jack-links up higher on the jacks thus making a larger shed on these two harnesses it cut out most of the looms, even if it did cause a little more stretch to these ends.

Since this was not a perfect cure, a test was made on one of these looms by breaking out a few of the fifth harness ends and drawing them into the next dent to the left which brought three ends in one dent and one in the other; but no difference could be seen in the cloth. All the other ends of the fifth harness were drawn in the same way and not a loop was seen afterwards, even when the jack-links were replaced.

The next cut of cloth from this loom was taken into the cloth room and examined without telling how it was done until it had been passed O. K.

We also have loops quite often about one to three inches from the selvedges. All weavers know that there is more strain on the warp ends near the selvedges—becoming tighter when the shed is open and looser when it is closed. The result is that when the shed is open the extra strain separates these ends pretty well; but there is a place just inside the end of the temple where it is often slack, especially if the temple burr is not working easily. Burrs should be greased a little occasionally. Then, if the temple is straight, it should be O. K.

We had some patterns with sateens warp stripes where this would not apply; so we found that the best we could do was to draw these stripes into the front harnesses and the plain in the rear. There are many patterns and variety of weaves, of which no one knows the best method of treating.

Frayed Ends.

Nothing interferes with production so much as this. And there are several things to consider. One pattern we had got the blame of being a very bad pattern, and there was no particular reason for it. After everybody was pretty well "fed up" with it, a filling boy called attention to some filling and asked if it was all right. "See," he said, and he tied the end to a nail in the wall and then unwound about two yards and tied it to another nail in the same wall. It looked all right, but when he drew his thumb and finger along the thread with a slight pressure we could see that some of the fibres were slack and sagged down, while a few stiil perfectly straight.

If even a medium weaving strain was put on this thread, those that were straight or those that were tight would break and we would hardly see the broken ones. But when weaving in the loom, the reed or harnesses would keep pushing them back until it made a snarl, and then break out other ends besides. As this was filling it should not have bothered that way, but it led to an examination of the warp on the bad pattern and the same condition was found there. This defect was later remedied by the making of the yarn.

Another case. Where the top beams are used, we found by a lot of experimenting that we must run the ends from the beams to the harnesses in as straight a line as possible, and not let them rub against anything if it was possible to do so, nor let it run parallel amongst the cotton ends, since the little fibres of the cotton ends twist in amongst the silk fibres and break them.

Vibrating Whip Roll.

The question, "What about a vibrating whip roll" is often asked? We find it a good thing where it can be set in such a way as to avoid any sudden jerk or snap on the silk. For instance, where there is quite a piece of close woven goods, and there is a "bump" to the cloth in weaving, a little vibration of the whip roll is a help; but if we get too strong the ends see-saw back and forth too much and chafe.

On light weaves, the vibrating roll is not so difficult to set to get good results, as we have very little see-saw. Great care must be taken in beaming the top beam of silk. Generally there are far less ends than in the bottom beam, and as each end is run from an individual spool or cone one may build up a little higher than on others, thus making it loose in weaving.

And if a large percentage of them are built up, the others will be tight and take all of the beam friction, causing the fibres of these tight ones to break and fray.

We tried several ways of beaming. First fixed up an oscillating arrangement like cones are wound, but could not make good sides on account of the beam heads—would like to take off the two heads and try it. Later on we tried out an idea that looked pretty good but turned out so foolish I don't like to mention it. We next took large sheets of manila paper and put one sheet under the ends so that it would wind around the beam—every 75 to 100 yards. This had a tendency to level it as the beams grew in size. This was a fine improvement.

The designer should try as much as possible to lay out patterns with nearly equal take-up on the different ends from the same beam. Different conditions in different mills, machinery, etc., require different treatment. In fact, no two looms are exactly the same, but I have tried to consider a few points that are applicable to all. If these remarks prove of assistance to only one fellow overseer it will gratify me.—Fibre and Fabric.

Pacific Mills Sales Conference

Pacific Mills' domestic sales force of the company's cotton goods sales organization held a four days' conference in New York last week. The conference was addressed by Edwin Farnham Greene, treasurer, Alfred E. Colby, assistant treasurer, and various department heads of the company.

Mr. Greene, in welcoming the members of the sales organization, referred to many innovations introduced to keep the company and its production abreast of the times. He said, in part:

"A few years ago the market for textiles was a seller's market. Practically all an organization had to do was to announce the lines and take orders. Demand and supply were well balanced. Now we have a buyer's market and very discriminating buying with the result that supply sometimes exceeds even possible as well as actual demand. Problems have arisen that have called for a reorganization in all efforts from production to marketing in order to enable the industry to meet changed and changing conditions. Today it is recognized that production is not to be based on the capacity of the mill, but rather the mill must find out what the country wants and make those goods.

"One of the greatest problems of the industry is distribution or what may be better termed marketing. Pacific Mills has been giving due attention to that and the other problems of the industry. We are attaching great importance to making what the market wants and to giving the service that the trade wants. We have made radical changes because we have been convinced that the industry would not get anywhere by following old traditions and old policies.

"We have reached out for new ways and new things and we believe we have arrived at a new day. It is with a great deal of confidence that we are working out the new ideas, and while there has been a depression for the past two or three years, I think the hardest years are behind us."

In opening the business session, Victor Bowman, sales manager of the cotton goods departments, explained that the purpose was to reach a clear understanding of the sales job before the organization for the balance of the year and to review plans formulated to realize the utmost from sales possibilities and give the greatest service to the trade.

"We will specialize in our effort," he said, "and through this specialization our various groups will be able to give undivided attention to the several departments of the company enabling them better to serve the trade and to be in a better position to keep the trade posted on all phases of the lines and to give useful suggestions and advice.

"In watching sales, if we find that we are not building up in certain lines and the evidence shows that this is a general condition, it will then be up to the sales manager and the merchandise manager to make a personal investigation. If this discloses that the lines are wrong the necessary steps will be taken to make them right.

"Our total quota is broken down into as many parts as there are salesmen so that each man will know his share. This is done on a fair basis taking into account the business done in each territory and the possibilities for business in each territory. This breakdown, quota, or budget is each man's share of the general responsibility but it is by no means the limit of his sales effort. We expect and we know that each one will continue to strive for sales after reaching his quota, because a sales job is selling and the more sold the better the job. It is not only better for us but its success is an indication of a better merchandising service given to the trade.

"Specialization of effort makes it possible to concentrate on specific lines at any timely period and thus to give the right service to the trade at the appropriate moment. This conference is expected to contribute information as well as to impart it. We, at headquarters, don't know it all and the information that you can give will help us so that we, in turn, can be of greater help to you. Your knowledge gained from outside contacts plus our experience at headquarters will fortify us to meet every condition that arises and thus

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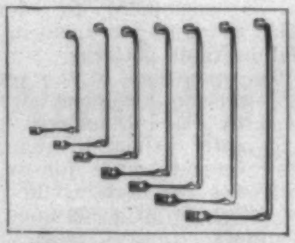

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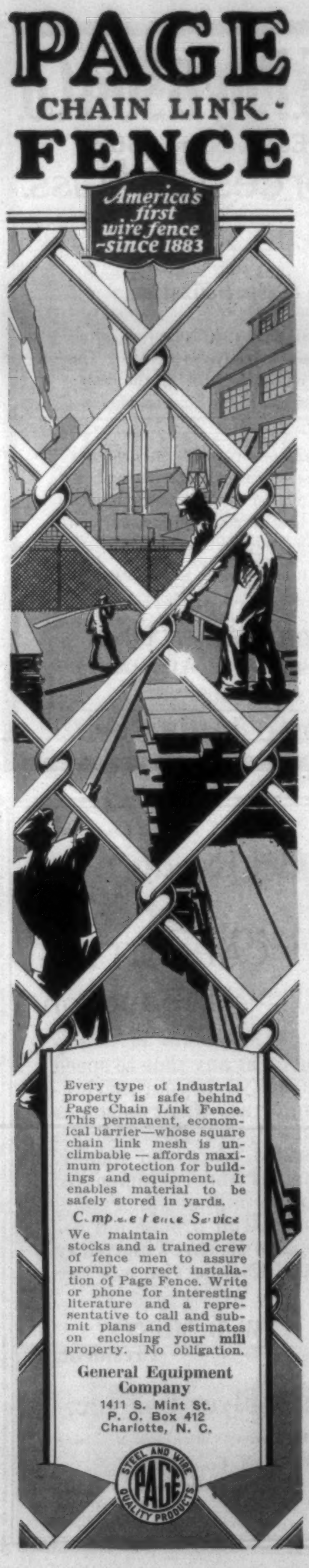
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be of the utmost service to the trade."

Alfred E. Colby, assistant treasurer, outlined various economies that had been effected by improved methods of operation, and discussed the advanced technical work of the chemical and other departments of the company.

The work of the sales promotion department was outlined by Aldrich Taylor, head of the department, whose remarks, in part, were as follows:

"We are here to furnish you with material of certain sorts that will help you or your customer in moving our goods; to provide examples of the usefulness of our products in their complete form, ready for use; we are here to work out with the department manager announcements of opening and of new lines, by advertising; and to help you in establishing in the minds of the trade a clear picture of the organization of which you are the business getters.

Walter S. Brewster, merchandise manager, explained the relation between the merchandising and selling divisions and discussed the merchandising and pricing of the fabrics.

How the Pacific style department conducts creative work was discussed by Goodell Hill, together with suggestions for close co-operation which should enable the sales force to capitalize on the activities of the department. Mr. Hill stated that a distinctive American taste was being developed in style and that better styling was now being done in this country for the American trade than was being done abroad, particularly in cottons. He illustrated how the style department, as part of its activities, aided the company's customers by developing ideas which they brought in for new and desirable patterns.

The operations of the company's sales service department were outlined by F. S. Blanchard, particularly with respect to changes and improvements made for expediting deliveries and enabling the promptest follow-up of goods upon receipt of orders.

Preventing Leaks in Mill Operation

(Continued from Page 7)

The Waste of Wastes, Raw Stocks and Finished Products With Which to Manufacture.

All manufacturers realize that there is always more waste of good materials used for manufacturing the finished product than is necessary. It is up to all supervisory forces to drive for an intensive service against all leakages of this kind. The best system to follow up wastes and which militates the strongest against waste making is the system now in forces among some of the more progressive mills. A progressive dependable man is put in charge of all waste matters including the waste house. He is practically the superintendent of wastes including the traffic of wastes throughout the mill. He is an assistant to the general superintendent. The system is simple and not burdensome. It is merely carried on in this way. Each hand in the mill has a private waste receiving box. The waste is charged up to each individual, and then to each section man, to each room and to each mill. So far as possible, whenever the waste is abnormally high at any point, or where there is a special lot of waste made, this must be fully analyzed. The section man must give an account as to why this is the case, who made the waste, how it was made or rather the cause of the making, how much was made, kind of waste made, at what machine made and how remedied. This creates interest, and gets down to the bottom of things and prevents leakages of this kind.

The Waste of Finished Goods Manufactured.

The above wastes are chased down in much the same way as the system used for chasing down the wastes of unmanufactured goods. Excepting that the finishing department account is treated as a separate matter and dealt with in a much more detailed manner.

Then there are many other leaks around most any mill, such as the waste of light and lamps, waste of heating the mill, waste of water, steam, chemicals, of tools, office supplies, and of many other things like gas, air, soaps, help turnover, waste of temper, words and bad feelings, stolen goods, etc.

Margins of profit are now so close that waste of all kinds must be most carefully guarded against. Leaks cost money which must be taken from the profits. The cost of needless leakages does not belong to the manufacturing costs. The extra cost paid out for needless leakages over and above the normal cost of manufacturing must, of necessity, come out of the profits which would have been paid out to the owners.

Skein Dyeing of Viscose Rayon

THE handling of rayon both in skeins and pieces is becoming of ever increasing importance in the dyeing trade, and naturally a great deal has been written and published concerning all phases of this problem, says Dr. W. M. Scott, in "Dyestuffs." However, at the risk of some repetition it might be of interest to consider the matter from the standpoint of the very excellent range of National direct dyes which are available to the dyer of viscsoe yarn.

The qqestion of producing evenness of shade throughout the dye lot has troubled dyers to a greater or less degree ever since the adoption of rayon on a large scale. This evenness of shade is affected by a number of factors of which the following are most important:

1. The character of the viscose yarn.
2. The temperature of the dyebath.
3. The nature and amount of the chemicals used to assist the dyeing.
4. The type of dyeing machine.
5. The choice of dyestuffs.

Variations in shade due to differences in the yarn itself were quite common a few years ago. It was found that each batch of viscose,

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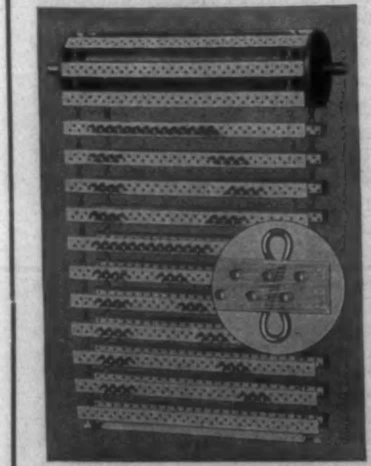

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owing to slight differences in manufacture, particularly in the ageing operation, would possess a noticeably different affinity for dyestuffs. As the viscose manufacturers have gradually become more experienced and have standardized their processes more carefully, the variations from lot to lot have diminished, but even at the present time it is advisable that the entire dye lot should originate from the same batch of viscose. Grade A yarn possesses the highest qualifications and is the one most likely to give uniform dyeings.

A general rule with regard to the temperature of the dyebath is that the higher the temperature, the more even is the result. It has been frequently stated that viscose should be dyed at low temperatures but such is decidedly not the case in yarn dyeing. Some of the largest dyehouses engaged in this class of work make it a practice to apply all direct dyestuffs at about 190 degrees F., entering the yarn at this tem- F., entering the yarn at this temperature and maintaining it throughout the dyeing. No depreciation of lustre or strength is observed.

One of the best assistants to use in the dyebath is a good grade of neutral soap made from olive oil or red oil. If only light or medium shades are required, it is preferable not to use Glauber's salt. There may be a certain loss of dyestuff due to lack of exhaustion, but this is more than offset by the increased evenness of the dyed lots. For heavy shades, Glauber's salt may be added in small amounts during the course of the dyeing in order to promote the exhaustion of the dyestuffs. Some dyers prefer to use a sulphonated oil or a soap made from the same, in place of the neutral soap mentioned above.

Viscose yarn may be dyed in ordinary hand barks and is largely handled in this manner. However, special care must be exercised in turning the skeins so that the fibres do not become tangled and thus cause bad winding. Viscose yarn has also been successfully handled in Klauder-Weldon dyeing machines as well as machines of the Mayo type. It is always advisable to obtain the correct shade as quickly as possible, as long runs in these machines tend to disarrange the skeins and render them very difficult to wind.

The choice of dyestuffs, particularly for compound shades, is probably the most important factor affecting the evenness of the dyeings. Where the shade may be matched with a single dyestuff there is not much cause for worry, as the most uneven dyeing types can be successfully used with proper care. Where two or more dyestuffs are required, the greatest care should be used to select those which are in the same class with respect to evenness of application.

Exports of Cotton.

Exports of cotton for the week ending July 22 amounted to 99,613 bales as compared with 57,121 bales for the corresponding week in 1926, according to statistics compiled by the Cotton Marketing Division, Department of Agriculture.

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Cotton Goods

New York.—A fairly good business was reported in cotton goods during the week. Prices were higher due to the advancing price of cotton. Sales of print cloths and sheetings were numerous but most of them covered only small lots. Mills making these goods are well sold through the summer months and some of them well into the fall. Production continued large, but there has been no accumulation of stocks.

Mills making fine and fancy goods have good orders on hand for shirtings, although the plainer staples have not sold so well. There have been good sales of rayon and silk mixtures for late fall and early spring.

Prices on cotton blankets have been moved up five per cent and both blanket and flannel mills have large business on hand. Prices of coarse colored goods were firmer. Denims were a cent a yard higher and many lines of tickings, cheviots and similar goods were up half a cent a yard. Ginghams sold slowly during the week and fancy yarn dyed goods were not active.

Fair business in print cloths was reported, with general trade quiet. Prices hold strong and tend slightly upward. Those who sought actual spots of 64x60, 5.35 yard, were surprised to find these rather scarce. The contract market is firm at 7⅝, and there are some who ask three-quarters.

Nearby 68x72, 4.75 yard bring a premium when available. There have been reports that seven-eighths was paid this week for July delivery. There had also been further reports that seven-eighths had been paid for August. The rumors were that first hands were unable to supply the nearby goods, and that second hand channels had been sought. September and October had sold at 8¾ cents. There are some first hand sellers quoting seven-eighths for September.

Moderate trading in the sheeting section was reported with spot 56x60s sold at 9¼ cents, contracts held for 9 cents. Sales of 36-inch 5.50-yard were made at 6¼ cents for August and 7⅞ cents was paid for 40-inch 4.25-yard, September available at 7¾ cents. On 36-inch 3-yard trading was at 10⅝ cents for later, a number holding for 10½ cents. During the earlier part of the day sales of 37-inch 4-yard were at 8¼ cents. A good many tinged 40-inch 2.85 yard sold at 10 cents and clean again brought 10¾ cents for quick.

Sales of 60-44s combed warp rayon filled plain goods were at 15 cents. The quantities involved were reported to be in excess of 10,000 pieces. Little new business is being recorded on the standard 64x48s, which are held for 16 cents where imported rayon is used and 16½ cents for domestic makes. The use of high counts is a feature in fall lines and up to 88 squares with either 60s or 55s combed cotton yarns is not infrequent, the rayon denier remaining 150.

Plain fine goods constructions have sold moderately and at prices which show no changes. The threat of pegging them higher does not cause buyers to hurry their purchases. The intention is to get ready when the business warrants action, and not before. A few each day come in, attracted by the moderation of quotations on the cloths they are running.

With the exception of narrow goods, the Fall River print cloth market continued quite uninteresting during the week, estimated sales being placed at 60,000 pieces. Some bids were heard slightly under present prices but mills were firm and not interested as long as cotton remains at its present level. Sateens and twills were in moderate request for delivery in the next month with 38½-inch and 36-inch numbers quiet.

For narrow goods, good volume trading was reported in 31½-inch 48 square, 8.70, at 5¼, and 27-inch, 56x52, 9.00, at 5⅛. Mills are holding very firm at 4¼ for 25-inch, 52x44, 11.00, refusing bids of 4⅛. There was also active trading in 25-inch, 48x40, 12.00, at 3⅞. Narrow numbers continue very scarce.

The wide goods situation presents increased curtailment of looms adapted to these numbers. Mills are determined not to take on additional business on the present prices, with cotton continuing out of line. Small lots of 38½-inch, 64x60, 5.35, were reported at 7¾, and 38½-inch, 44x40, 8.20, at 5¼. In the wider widths, straggling business was reported put through in 39-inch, 56x44, 6.60, at 6⅜.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s	6
Print cloths, 28-in., 64x60s	5¾
Print cloths, 27-in., 64x60s	5½
Gray goods, 38½-in., 64x64s	7⅞
Gray goods, 39-in., 68x72s	8¾
Brown sheetings, 3-yard	10¾
Brown sheetings, 4-yard, 56 x60	9½
Brown sheetings, stand.	11¾
Tickings, 8-oz.	19½a20½
Denims	16
Staple ginghams, 27-in	9
Kid finished cambrics	8 a 9
Dress ginghams	14⅝a16½
Standard prints	8

CHAS. H. STONE
DYESTUFFS AND CHEMICALS
CHARLOTTE, N. C.
Over Twenty-two Years Experience

The Yarn Market

Philadelphia, Pa.—The yarn markets showed considerable improvement during the week and there were many indications that buying should become considerably more active within the nex tfew weeks. Inquiry was large throughout the week and actual sales were larger. In most cases, individual orders continued rather small, but they were much more numerous. The rise in cotton made for a stronger price situation. Mills kept prices on a very firm basis. Many of them were not willing to take contracts for future delivery at present prices, as they believe that cotton prices are likely to go considerably higher. Buying interest was more marked than it has been in several weeks and many consumers were ready to take larger quantities than they would consider ten days ago.

The best demand for carded yarns continued to come from the knitting mills. This business covered a wide range of numbers and the sustained inquiry showed that knitters are considering covering their needs in a fairly large way. Wegving mills took somewhat more yarns, but were not as active in buying as the knitting trades.

A moderate amount of business was done in combed and mercerized yarns. The price situation continued strong, but with the list showing very little quotable change. Some dealers anticipate an advance in combed and mercerized rates, a betterment in prices which would reflect the recent strength in both raw cotton and carded yarns. On the other hand, a few dealers point out that when combed and mercerized yarns advanced considerably during the mont hof May carded yarns remained relatively unchanged. However, if any buying movement should get under way in the very near future it is felt that both combed and mercerized counts will tend to higher levels.

The price list in this market, as shown below, is somewhat lower than most spinners are quoting:

Southern Two-ply Skeins.

8s	27½
10s	29½
12s	29½
14s	30½
16s	30½
20s	32
26s	36
30s	38
40s*	47
40s†	48½

Southern Two-ply Warps.

8s	28½
10s	29½
12s	29½
14s	30
16s	31
18s	31½
20s	32
24s	34
26s	36
30s	38
40s*	46½

Southern Frame Spun Carded Yarn on Cones—Cotton Hosiery.

8s	28½
10s	28½
12s	29
14s	29½
16s	31
18s	31½
20s	32
22s	32½
24s	32½
26s	33
30s	34½
40s	46

Southern Single Skeins.

4s-8s	28
10s	28½
12s	29½
14s	29½
16s	30
18s	30½
20s	31
22s	31½
24s	34
30s	34½
40s	44½

Southern Single Warps.

4s-8s	28½
10s	29½
12s	29½
16s	30½
18s	31½
20s	32½
24s	34½
30s	36½
40s	46½

Southern Two-ply Comber Peeler Mercerizing.

8s-12s	44
20s	45
30s	49
36s	54
38s	56
40s	57
50s	59
60s	68
70s	78
80s	91

Southern Two-ply Hard Twist Combed Peeler Weaving Yarns.

8s-12s	40½
10s	42½
30s	47½
36s	52½
40s	54½
50s	55½
60s	57½
70s	77½
80s	86½

Two-ply Mercerized Yarn.

20s	62
30s	66
40s	71
50s	78
60s	87
70s	1.01
80s	1.14

Durham Mills Operating Full Time

Durham, N. C.—The textile mills of this section are all operating full time, many of them in double shifts, and there is no indication that there will be any curtailment of production this summer. If the prospects hold good, this will be the first summer in several years that there has not been voluntary curtailment of working hours, and sometimes complete closing down for weeks.

The exceptionally busy period, however, does not mean that the mills are enjoying an unusual degree of prosperity. There is not a great deal of margin, it is said, between costs and selling prices. Those mills that are operating at night are increasing their balances to some extent by cutting down their average overhead expenses.

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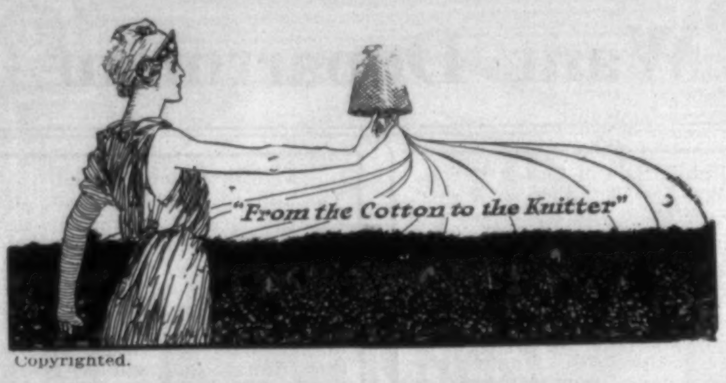
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Want Department

Public Sale of Cotton Mill

On the first Tuesday in August, 1927, between the legal hours of sale, at Athens, Georgia, there will be sold before the Court House door by the undersigned acting as Trustee for bond holders, the property in Athens, Georgia, known as Clarke Cotton Mills, formerly the White Manufacturing Company, consisting of the following:

One 3456 Spindle Yarn Mill. Equipped to make two and three ply yarns fourteen to twenties. Ample carding and finishing machinery. Ample supply of well made cottages for operatives Mill owns sufficient land for expansion. Located on Railroad. Good manufacturing climate, Piedmont section. Ample labor and power available. Terms of sale cash. Full information will be furnished by communicating with

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Athens, Georgia. Trustee

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Fancy roller attachments for 40 inch flats cards. Must be complete with pulleys. Give prices in first letter. Little Rock Textile Company, Little Rock, Arkansas.

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Information Wanted

The present address of Miss Evelyne Bramlett, who in May, 1925, lived in Charlotte, N. C., and worked in one of the mills in the city, is desired by R. D. Hicks of the Inman Telephone Exchange, Inman, S. C. If Miss Bramlett or her friends will kindly give us this information, will be greatly appreciated and will pay for same if desired.

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If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only $1.00.

During the three month's membership we send the applicant notices of all vacancies in the position which he desires and carry small advertisements for two weeks.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern Textile Industry.

WANT position as manager or agent. Many years experience in both yarn and weave mills. Good character, loyal and efficient. No. 5200.

WANT position as overseer spinning in Texas, Ark., La. or Miss. 40 years of age. 20 years experience. Can handle small or large room. No. 5201.

WANT position as Superintendent or overseer weaving; can handle auto fabrics or plain goods. Would consider a good yarn mill. No. 5202.

WANTED by young man 21 years old with good references, position in mill office. Completed High School and the Georgia College of Commerce. Good stenographer and familiar with adding machine. No. 5203.

WANT position as superintendent, overseer carding or overseer spinning. References to anyone interested. No. 5204.

WANT position as overseer carding. 21 years experience on all kinds of work. No. 5205.

WANT position as overseer weaving. Experienced and competent. No. 5206.

WANT position as agent, superintendent or manager, anywhere. No. 5207.

WANT position as overseer carding, spinning, or spooling, twisting and warping. Can give the best of reference. No. 5308.

WANT position as superintendent, or as overseer weaving in a large mill. Best of references. No. 5209.

WANT position as overseer weaving. 10 years experience on plain and fancies, cotton or silk. Familiar with Draper, Stafford and Crompton & Knowles looms. Guarantee satisfaction. No. 5201.

WANT position as overseer weaving, wide and narrow sheetings, drills, sateens or krinkled bedspreads. 18 years experience in weaving, warping and slashing. No. 5211.

WANT position as overseer cloth room. 20 years experience. Good references. Married and strictly sober. Can change on short notice. No. 5212.

WANT position as overseer weaving. 10 years experience on plain, drills and twills. Can furnish best of references.

WANT position as overseer carding, large mill. Fully acquainted with combed and carded work. Best of references. No. 5214.

WANT position as overseer weaving, plain, fancies or broadcloth. Draper, C. & K., dobby work. Good references. No. 5215.

WANT position as overseer spinning. Experienced, efficient. No. 5216.

WANT position as overseer cloth room. 20 years experience. Understand cloth grading and a good manager of help. No. 5217.

WANT position as overseer carding. In present position 5 years. Personal reasons for wishing to change. Best of references. No. 5218.

WANT position as superintendent, overseer spinning or overseer weaving. Can handle 2,500 looms and slashing in any mill. References. No. 5219.

WANT position as cashier, bookkeeper or other clerical work in mill office. Good stenographer, typist and correspondent. A willing worker. 9 years experience. No. 5220.

WANT position as overseer weaving. Would consider a night job. Eight years experience. Can handle large job. No. 5221.

WANT position in Piedmont section as mill office stenographer and general office work. Experienced. Good reference. Am a lady 23 years of age. No. 5222.

WANT position as overseer weaving. Overseer 10 years. I. C. S. diploma. Want to locate in North or South Carolina. 34 years old. Married. No. 5223.

WANT position as overseer weaving on plain or corded goods. 20 years experience. Best of references. No. 5224.

WANT position as overseer weaving. Experienced and competent. Good references. No. 5225.

WANT position as spinner. Familiar with carded and combed yarns, coarse and fine yarns. 10 years overseer. Best references. No. 5226.

WANT position as carder, spinner, or superintendent of same. References on request. No. 5227.

WANT office position—bookkeeper, time keeper, shipping clerk, or receiving clerk. No. 5228.

WANT position as dyer. 10 years experience on raw stock and skeins. Married and now employed. Address T. S., No. 5229.

WANT position as superintendent. 20 years experience white and colored work. Now employed. Carolinas preferred. No. 5230.

WANT position as assistant superintendent or overseer spinning. Age 35. Employed but want better location. Best of references. No. 5231.

WANT position as overseer carding or superintendent of yarn mill. Can make quick change, and give best of references. No. 5232.

WANT position as overseer small or second hand in larger fancy weaving department. 18 years weaving experience—6 years second hand. Good references. No. 5233.

WANT position as overseer carding. 20 years experience, grinding, fixing speeders, running picker and card room. Want day job. No. 5234.

WANT position as superintendent, or any department in mill. 10 years experience fancy and plain goods. Graduate Bowin College. Good references. No. 5235.

WANT position as superintendent or will take any department in a large mill. Expert on fancy weaves, all makes of looms. North Carolina preferred. Best references. No. 5236.

WANT position as carder and spinner, or superintendent. Experienced. References. No. 5237.

WANT cloth room. 23 years with one company; 18 years in cloth room, four years as overseer. Experienced on sheetings, prints, lawns. No. 5238.

WANT position as cloth room overseer or finisher. 20 years experience. References. No. 5239.

WANT position as overseer spinning, large plant. 15 years experience. 38 years old. Good references. No. 5240.

WANT position as superintendent or overseer weaving. Expert on cord fabrics. I. C. S. diploma. 36 years old. No. 5241.

WANT position as overseer weaving, slashing, spooling, warping. Plain or fancies, white or colored. References. No. 5242.

WANT position as carder, spinner or outside man. Prefer outside. Experienced and the best of references as to character and ability. No. 5243.

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- **Cones (Paper)—**
  - Sonoco Products Co.
- **Cone Vice Couplings—**
  - William Sellers & Co., Inc.
  - Cutler-Hammer Mfg. Co.
- **Controllers, Electric—**
  - Cocker Machine & Foundry Co.
- **Conveying Systems—**
  - Link-Belt Co.
- **Coolers (Air)—**
  - ——See Humidifying Apparatus.
- **Cotton—**
  - Lesser-Goldman Cotton Co.
  - Newburger Cotton Co.
  - Wm. & York Wilson.
- **Cotton Machinery—**
  - Ashworth Bros.
  - Barber-Colman Co.
  - Collins Bros. Machine Co.
  - Crompton & Knowles Loom Works
  - Dixon Lubricating Saddle Co.
  - Draper Corporation
  - T. C. Entwistle Co.
  - Fales & Jenks Machine Co.
  - Foster Machine Co.
  - H. & B. American Machine Co.
  - Rodney Hunt Machine Co.
  - National Ring Traveler Co.
  - Roy, B. S. & Son
  - Saco-Lowell Shops
  - Southern Spindle & Flyer Co.
  - Stafford Co., The
  - Terrell Machine Co.
  - Tolhurst Machine Works
  - Universal Winding Co.
  - Whitin Machine Works
  - Whitinsville Spinning Ring Co.
  - Woonsocket Machine & Press Co., Inc.
- **Cotton Openers and Lappers—**
  - Saco-Lowell Shops
  - Whitin Machine Works
  - Woonsocket Machine & Press Co., Inc.
- **Cotton Softeners—**
  - Arabol Mfg. Co.
  - Arnold, Hoffman & Co., Inc.
  - Borne, Scrymser Co.
  - Bosson & Lane
  - Hart Products Corp.
  - E. F. Houghton & Co.
  - Oakite Products, Inc.
  - Seydel-Woolley Co.
  - L. Sonneborn Sons, Inc.
  - United Chemical Products Corporation.
  - Wolf, Jacques & Co.
- **Cotton Waste Machinery—**
  - Saco-Lowell Shops
  - Whitin Machine Works
  - Woonsocket Machine & Press Co., Inc.
- **Couplings (Shaft)—**
  - Charles Bond Company
  - William Sellers & Co., Inc.
- **Cranes—**
  - Link-Belt Co.
- **Dobby Chain—**
  - Crompton & Knowles Loom Works
  - Rice Dobby Chain Co.
- **Doffing Boxes—**
  - Diamond State Fibre Company
  - Rogers Fibre Co.
- **Doublers—**
  - Saco-Lowell Shops
  - Textile Finishing Machinery Co.
  - Universal Winding Co.
- **Doublers (Yarn)—**
  - Foster Machine Co.
- **Drives (Silent Chain)—**
  - Charles Bond Company
  - Link-Belt Co.
  - Morse Chain Co.
- **Drop Wires—**
  - Crompton & Knowles Loom Works
  - Draper Corporation
  - R. I. Warp Stop Equipment Co.
- **Dryers (Centrifugal)—**
  - Roy, B. S. & Son Co.
  - Tolhurst Machine Co.
- **Dyeing, Drying, Bleaching and Finishing Machinery—**
  - H. W. Butterworth & Sons Co.
  - Cocker Machine & Foundry Co.
  - Franklin Process Co.
  - Perkins, B. F. & Sons, Inc.
  - Rodney Hunt Machine Co.
  - Textile Finishing Machinery Co.
- **Dyestuffs and Chemicals—**
  - Borne, Scrymser Co.
  - Bosson & Lane
  - E. I. du Pont de Nemours & Co., Inc.
  - General Dyestuff Corporation.
  - National Aniline & Chemical Co.
  - Newport Chemical Works
  - Chas. H. Stone
  - United Chemical Products Corp.
  - Wolf, Jacques & Co.
- **Dye Works—**
  - Franklin Process Co.
- **Electric Fans—**
  - Allis-Chalmers Mfg. Co.
  - General Electric Co.
  - Wetinghouse Electric & Mfg. Co.
- **Electric Hoists—**
  - Allis-Chalmers Mfg. Co.
  - Link-Belt Co
- **Electric Lighting—**
  - Allis-Chalmers Mfg. Co.
  - General Electric Co.
  - Westinghouse Electric & Mfg. Co.
- **Electric Motors—**
  - Allis-Chalmers Mfg. Co.
  - Charles Bond Company
  - General Electric Co.
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  - Cooper-Hewitt Electric Co.
  - General Electric Co.
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  - Link-Belt Co.
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  - ——See Architects and Mill Engineers
- **Engineers (Ventilating)—**
  - Bahnson Co.
  - Carrier Engineering Corp.
  - Parks-Cramer Co.
  - See also Ventilating Apparatus.
- **Engines (Steam, Oil, Gas, Pumping)—**
  - Allis-Chalmers Mfg. Co.
  - Sydnor Pump & Well Co.
- **Expert Textile Mechanic—**
  - J. D. Hollingsworth
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  - Tolhurst Machine Works
- **Fences, Iron and Wire)—**
  - Page Fence and Wire Products Assn
  - Wickwire Spencer Steel Co.
  - Spauling Fibre Co.
- **Fibre Baskets—**
  - Diamond State Fibre Company
- **Fibre Boxes—**
  - Diamond State Fibre Company
  - Spauling Fibre Co.
- **Fibre Specialties—**
  - Diamond State Fibre Co.
  - Rogers Fibre Co.
  - Spaulding Fibre Co.
- **Finishing Compounds—**
  - The Arabol Manufacturing Co.
  - Arnold, Hoffman & Co., Inc.
  - Borne, Scrymser Co.
  - Hart Products Corp.
  - Seydel Chemical Company
  - Seydel-Woolley Co.
  - L. Sonneborn Sons Co
  - United Chemical Products Corp
  - Jacques Wolf & Co.
- **Finishing Machinery—**
  - ——See Dyeing, Drying, Bleaching and Finishing
- **Flat Wall Paint—**
  - E. I. du Pont de Nemours & Co., Inc
- **Fluted Rolls—**
  - Collins Bros. Machine Co.
  - Fales & Jenks Machine Co.
  - Saco-Lowell Shops
  - Woonsocket Machine & Press Co., Inc
  - Whitin Machine Works
- **Flyer Pressers and Overhaulers—**
  - Saco-Lowell Shops
  - Southern Spindle & Flyer Co.
  - Whitin Machine Works
  - Woonsocket Machine & Press Co., Inc
- **Flyers—**
  - Saco-Lowell Shops
  - Southern Spindle & Flyer Co.
  - Whitin Machine Works
- **Frames—**
  - Steel Heddle Mfg. Co.
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  - ——See Clutches
- **Garment Dyeing Machines—**
  - Klauder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co
- **Garnett Roll Grinders—**
  - B. S. Roy & Son Co.
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  - Link-Belt Co.
- **Gears—**
  - Charles Bond Company
  - Ferguson Gear Co.
- **Gears (Silent)—**
  - Charles Bond Company
  - Diamond State Fibre Company
  - Ferguson Gear Co.
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  - Scriver Iron Works (McNaughton)
  - Thomas Grate Bar Co.
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  - The Arabol Manufacturing Co.
  - Borne, Scrymser Co.
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  - Textile Mill Supply Co.
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  - ——See Heddles and Frames
- **Heddles and Frames—**
  - Garland Mfg. Co.
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  - The Roessler & Hasslacher Chemical Co.
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  - Jacques Wolf & Co.
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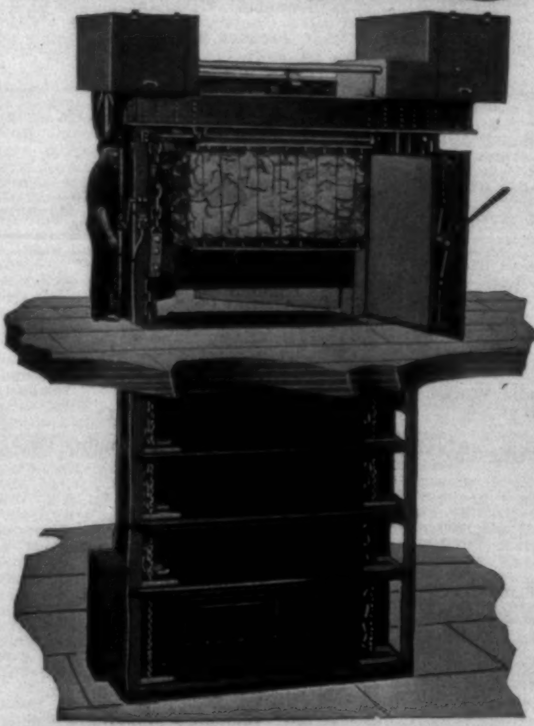
Eastwood, Benj. Co.
Saco-Lowell Shops.
Whitin Machine Works.
Spooler Tensions (Filling Wind)—
Foster Machine Co.
Sprockets—
Cocker Machine & Foundry Co.
Sprockets, Silent Chain—
Link-Belt Co.
Morse Chain Co.
Squeeze Rolls—
H. W. Butterworth & Sons Co.
Rodney Hunt Machine Co.
Textile Finishing Machinery Co
Starch—
The Arabol Manufacturing Co.
Arnold, Hoffman & Co., Inc.
Corn Products Refining Co.
Keever Starch Co.
Penick & Ford, Ltd.
Stein, Hall & Co.
United Chemical Products Corporation.
Stencil Machines—
A. J. Bradley Mfg. Co.
Stencil Papers—
A. J. Bradley Mfg. Co.
Stripper Cards—
L. S. Watson Mfg. Co.
Wickwire Spencer Steel Co.
Sulphur Deying Machines—
Klauder Weldon Dyeing Machine Division, H. W. Butterworth & Sons Co.
Tanks—
H. W. Butterworth & Sons Co.
Rodney Hunt Machine Co.
Textile Finishing Machinery Co.
Tape—
Georgia Webbing & Tape Co.
Temperature, Regulators, Pressure—
Powers Regulator Co.
Temples—
Draper Corporation.
Textile Apparatus (Fabric)—
B. F. Perkins & Son, Inc.
Henry L. Scott & Co.
Textile Castings—
H. W. Butterworth & Sons Co.
Cocker Machinery & Foundry Co
Textile Finishing Machinery Co.
Textile Dryers—
American Moistening Co.
Textile Gums—
The Arabol Manufacturing Co.
United Chemical Products Corporation.
Jacques Wolf & Co.
Textile Machinery Specialties—
H. W. Butterworth & Sons Co
Cocker Machinery & Foundry Co
Rodney Hunt Machine Co.
Textile Finishing Machinery Co.
Textile Soda—
J. B. Ford Co.
Mathieson Alkali Works.
Thermometers—
Powers Regulator Co.
Top Rolls For Spinning Frames—
Saco-Lowell Shops
Washburn.
Trademarking Machines—
Curtis & Marble Machine Co.
Transfer Stamps—
Kaumagraph Co.
Transmission Belts—
Charles Bond Company.
Graton & Knight Co.
Edward R. Ladew Co.
Transmission Machinery—
Allis-Chalmers Mfg. Co.
William Sellers & Co., Inc.
Toilets—
Vogel, Jos. A. Co.
Transmission Silent Chain—
Link-Belt Co.
Morse Chain Co.
Traveler Cups—
Whitinsville Spinning Ring Company
Trucks (Mill)—
Diamond State Fibre Company
W. T. Lane & Bros.
Rogers Fibre Co.
Trucks For Pin Boards—
Washburn.
Tubes (Paper)—
Sonoco Products Co.
Turbines (Steam)—
Allis-Chalmers Mfg. Co.
Twister Rings—
Saco-Lowell Shops
Whitinsville Spinning Ring Co.
Twisting Machinery—
Collins Bros. Machine Co.
Draper Corporation.
Saco-Lowell Shops.
Whitin Machine Works.
Underwear Machines—
Morrow Machine Co.
Varnishes—
The Glidden Co
Ventilating Apparatus—
American Moistening Co.
Parks-Cramer Co.
Warp Drawing Machines—
Barber-Colman Co.
Ventilating Fans—
B. F. Perkins & Son, Inc.
Warpers—
Barber-Colman Co.
Crompton & Knowles Loom Works
Draper Corporation.
Easton & Burnham Machine Co.
T. C. Entwistle Co.
Saco-Lowell Shops.
Warp Conditioners—
E. F. Houghton & Co.
Warp Dressing—
The Arabol Manufacturing Co.
Arnold, Hoffman & Co., Inc.
Bosson & Lane.
Drake Corporation.
Hart Products Corp.
Seydel-Woolley Co.
L. Sonneborn Sons Co.
United Chemical Products Corporation.
Warp Sizing—
The Arabol Manufacturing Co.
Borne, Scrymser Co.
United Chemical Products Corporation.
Jacques Wolf & Co.
Warp Stop Motion—
Draper Corporation.
R. I. Warp Stop Equipment Co
Warp Tying Machinery—
Barber-Colman Co.
Warper Shell—
Cocker Machine & Foundry Co.
Warpers (Silk or Rayon)—
Eastwood, Benj. Co.
Sipp Machine Co.
Washers (Fibre)—
Diamond State Fibre Company
Rogers Fibre Co.
Waste Reclaiming Machinery—
Saco-Lowell Shops.
Whitin Machine Works.
Woonsocket Machine & Press Co., Inc
Waste Presses—
Economy Baler Co.
Water Controlling Apparatus—
Rodney Hunt Machine Co.
Water Wheels—
Allis-Chalmers Mfg. Co.
Weighting Compounds—
Arabol Mfg. Co.
Bosson & Lane.
General Dyestuff Corp.
Hart Products Corp.
Marston, Jno. P. Co.
Seydel Chemical Co.
Seydel-Woolley Co.
L. Sonneborn Sons, Inc.
United Chemical Products Corporation.
Wolf, Jacques & Co.
Well Drillers—
Sydnor Pump & Well Co.
Whizzers—
Tolhurst Machine Works.
Winders—
Easton & Burnham Machine Co.
Eastwood, Benj. Co.
Foster Machine Co.
Universal Winding Co.
Winders (Skein)—
Foster Machine Co.
Sipp Machine Co.
Windows—
Carrier Engineering Corp.
Parks-Cramer Co.
Window Guards—
Wickwire Spencer Steel Co.
Wrenches—
Wickwire Spencer Steel Co.
Yardage Clocks—
T. C. Entwistle Co
Saco-Lowell Shops
Yarns—
Mauney-Steel Co.
Yarn Tension Device—
Eclipse Textile Devices, Inc.
Saco-Lowell Shops
Yarn Presses—
Economy Baler Co.
Yarns (Cotton)—
Acme Sales Co.
Dixie Mercerizing Co.
Yarns (Mercerized)
Acme Sales Co.
Dixie Mercerizing Co.
Yarn Testing Machines—
Scott, Henry L. & Co.



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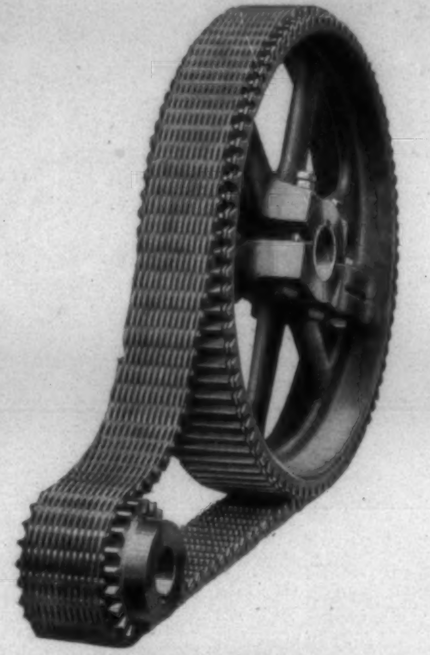

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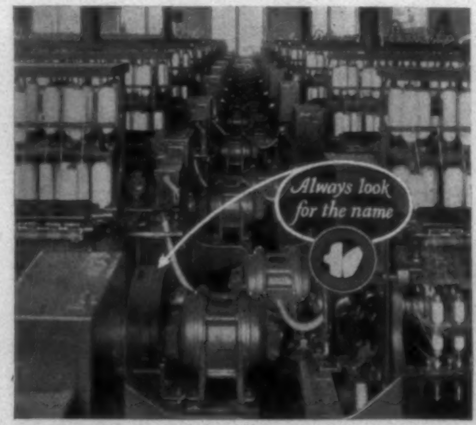

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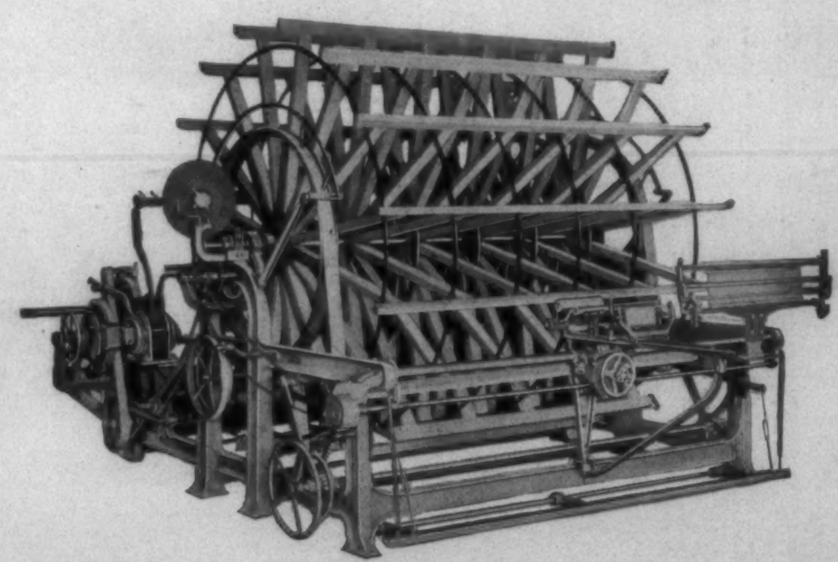

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